

*Ministry of
Water, Land and
Air Protection*

**2004/05
Annual Service Plan Report**



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* Refer to note on page 3.

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PLEASE NOTE: On June 16, 2005, the government ministries were re-organized to reflect the new cabinet responsibilities. Many of the website addresses and links in this printed report may have changed following the government re-organization.

- A list of the new ministries is available on the government website at <http://www.gov.bc.ca> — follow the links to Ministries and Organizations.
- An index of all 2004/05 Annual Service Plan Reports, with up-to-date website links, is available online at <http://www.bcbudget.gov.bc.ca/annualreports/>.





Message from the Minister and Accountability Statement

I am pleased to present the Ministry of Water, Land and Air Protection's 2004/05 Annual Service Plan Report. Over the last three years, we have brought our best to everything we do and as this annual report shows, we have made real progress in protecting the water, land and air of this province. This report outlines our achievements in meeting the government's goals for the environment, the economy and the communities in which we live. It reflects the vital role our ministry has played in helping to revitalize the economy by modernizing legislation and strengthening environmental management through partnership and shared responsibility for sustainable economic development and environmental stewardship. It shows how we have endeavoured to balance maximizing the benefits from our natural resources with maintaining the quality of our environment and enhancing the health of our communities.

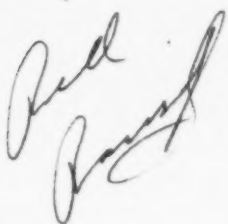
In 2004/05, we ushered British Columbia's environmental management practice into the twenty-first century by bringing the *Environmental Management Act* into effect. We have continued to refine codes of practice associated with the Act to further accelerate the redevelopment of contaminated sites and return them to productive use within communities. The Act adopts proactive, cutting edge tools that will enable ministry staff to focus on higher-risk activities.

British Columbia is recognized globally for its water, fish and wildlife. These natural resources and the splendour of our parks make British Columbia an international tourism destination. In 2004/05, we worked to maintain these valuable natural assets, which are at the heart of many recreational opportunities and economic activities enjoyed by British Columbians in all regions of the province. We created 37 new parks and expanded 34 others. We continued to dedicate funds to upgrade park facilities and entered into a partnership with the federal government to rebuild the historic Myra Canyon trestles. We pursued opportunities to enhance environmental stewardship by developing partnerships and dedicating funds for conservation and habitat restoration.

We continued our commitment to protecting the environment and human health by enacting legislation to help protect groundwater from contamination and developed an action plan to address climate change.

I would like to thank our staff, our colleagues in other ministries, our numerous partners outside government and the people of British Columbia for their support and dedication in protecting the quality of our province's water, land and air.

The 2004/05 Ministry of Water, Land and Air Protection Annual Service Plan Report compares the actual results to expected results identified in the ministry's 2004/05 Service Plan. I am accountable for those results as reported.

A handwritten signature in black ink, appearing to read 'Bill Barisoff', written in a cursive style.

Honourable Bill Barisoff
Minister of Water, Land and Air Protection

June 14, 2005

Highlights of the Year

The 2004/05 Annual Service Plan Report covers the fiscal year April 1, 2004 to March 31, 2005 and reports on the ministry's 2004/05 – 2006/07 Service Plan, which was prepared under the *Budget Transparency and Accountability Act*. All ministries are accountable for making yearly progress toward their goals and objectives and to report on that progress to the citizens of British Columbia. This annual report provides the public, stakeholders, legislators and other agencies with meaningful, credible information on the ministry's progress in achieving its vision and mission. It reports on the ministry's performance results and how they may affect future planning.

The Ministry of Water, Land and Air Protection has a broad scope and a wide range of responsibility. The work we do touches every person in our province and encompasses a large range of activities, involving numerous partners at the local, provincial and national level. Some of the ministry's significant actions and achievements over the past year are highlighted below. (See Appendix A for a glossary of terms and Appendix B for the ministry's progress in meeting its *New Era* commitments.)

April 2004

- The ministry's new Permit and Authorization Service Bureau was launched. The bureau is designed to handle approximately 20,000 applications for park use permits and fish and wildlife permits and commercial licences per year. Under this new structure, applications can now be downloaded over the internet, faxed or mailed into one office. The website for the bureau is: <http://wlapwww.gov.bc.ca/pasb/index.htm> *.

May 2004

- The Habitat Conservation Trust Fund is funding over \$5.5 million in 142 conservation, habitat restoration and enhancement projects this year. The projects will occur throughout the province, many of them led by community groups.
- Amendments to the *Protected Areas of British Columbia Act* created 37 new Class A parks and one new ecological reserve, and expanded 34 existing Class A parks and four ecological reserves. These new additions to the province's protected areas system come as a result of numerous land acquisitions and three Land and Resource Management Plans.
- The *Wildlife Amendment Act* received Royal Assent. The Act will expand government's powers to protect and recover species at risk. The legislation clarifies and reinforces British Columbia's authority to make its own decisions regarding species, using the best available science, and ensures full consideration of socio-economic implications.
- The ministry released an updated Identified Wildlife Management Strategy that designates species for special management to minimize the effects of forest and range practices on wildlife on Crown land.

* Refer to note on page 3.

- The Alberta–British Columbia Memorandum of Understanding (MOU) on Environmental Cooperation and Harmonization was signed. The purpose of the MOU is to develop and implement collaborative strategic approaches to common areas of environmental management, including regulatory harmonization.

June 2004

- The Province announced that it would increase spending on invasive weed control by \$3.3 million over the next two years. The increased funding will significantly expand existing provincial programs that target invasive plants on Crown land and in transportation corridors, and provide grants to local governments to encourage new regional weed-control programs.

July 2004

- The Riparian Areas Regulation was approved under section 12 of the *Fish Protection Act*. The Regulation applies to areas of the province that are experiencing the most rapid urban growth. The new rules are designed to provide clear direction to local governments and developers on the steps necessary to meet the requirements of the federal *Fisheries Act*, which prohibits activities that harm fish habitat.
- The *Environmental Management Act* was brought into force. The new Act brought provisions from the *Waste Management Act* and the *Environment Management Act* into one statute. The Waste Discharge Regulation, the Conservation Officer Regulation and amendments to the Contaminated Sites Regulation and Hazardous Waste Regulation came into effect at the same time. The Act and its regulations focus on high-risk operations, allow for codes of practice to regulate medium- and low-risk activities with one set of enforceable rules province-wide, and provide a more efficient, fair and accountable approach to contaminated sites.
- The Conservation Officer Service signed a Memorandum of Understanding (MOU) with Parks Canada. The MOU outlines cooperative measures and empowers Parks Canada Wardens with the necessary authorities for the Gulf Islands National Park Reserve and adjacent lands.

August 2004

- The Government of Canada and the Province of British Columbia announced a partnership to reconstruct the historic Myra Canyon trestles destroyed by wildfire in 2003. The trestles are a major tourism asset for the Okanagan economy and an invaluable part of the province's heritage. A task force, with representatives from the federal, provincial and local governments, and the Myra Canyon Trestle Restoration Society, was set up to consider options for the trestles. A plan has now been selected that includes a combination of scaled-down and historic rebuilds.
- A prescribed burn was carried out in Mount Robson Provincial Park to reduce wildfire risk and address the mountain pine beetle infestation. The burn is part of the multi-year Forest and Health Strategy for the park to deal with ecosystem management.

September 2004

- The Province announced that it will spend \$7 million over the next five years on a Living Rivers initiative. The funding will be directed toward specific enhancement, research and restoration projects related to rivers and watersheds, as well as toward increasing public awareness, strengthening partnerships, and enhancing the effectiveness of community organizations.
- The Canada – British Columbia Memorandum of Understanding (MOU) for the implementation of Canada's oceans strategy on the Pacific Coast was signed. To implement the MOU, the Government of Canada and the Province of British Columbia have agreed to jointly develop sub-agreements on various implementation measures relating to oceans management.

October 2004

- The Recycling Regulation under the *Environmental Management Act* took effect on October 7, 2004. The Regulation creates a single performance-based regulatory structure for all the ministry's industry product stewardship programs. It replaces two existing stewardship regulations for beverage containers and residual products (such as paint, oil, oil filters, bottles, pharmaceuticals and flammables), the provisions of which have been incorporated into the new Regulation. The new Regulation shifts the end of lifecycle responsibility for future product stewardship from local government and general taxpayers to industry and consumers.
- The provincial government created the B.C. Trust for Public Lands. The provincial contribution of \$8 million, with a minimum requirement for matching dollars from the conservation sector, will support improved conservation planning, and more efficient acquisition and management of private lands that have unique ecological values.

November 2004

- Phase 1 of the Ground Water Protection Regulation under the *Water Act* came into force on November 1, 2004. The Regulation is part of the Province's Action Plan for Safe Drinking Water, which protects water from source to tap. Phase 1 establishes standards to ensure wells are properly drilled, sealed, maintained and closed. It also establishes qualification requirements for well-drillers and well-pump installers, as well as requires wells to be flood-proofed so run-off contamination cannot occur during flooding and heavy rains.
- The Province protected over 16 hectares of critical wetland habitat on the Okanagan River. Located south of Oliver, the wetland is a significant feeding area and breeding ground for 25 species of waterfowl and habitat for many species of concern. Funding for the purchase came through the Environmental Enhancement Fund, created through an agreement between the Ministry of Water, Land and Air Protection and the Ministry of Transportation.
- The Province provided over \$315,000 to support community-based projects to improve British Columbia's air quality. The funding will support 20 community-based public education, awareness and research projects, including the development of regional

airshed plans and community events around the province for Clean Air Day in June 2005. Supported by the ministry, many regions have developed, or are in the midst of developing, airshed plans that focus on strategic partnerships and actions to improve air quality.

December 2004

- The B.C. Climate Exchange, a program that provides information on reducing greenhouse gas emissions, received \$60,000 in provincial funding. The B.C. Climate Exchange connects people with education and training programs, resources and tools to address climate change.
- The ministry released *Weather, Climate and the Future: B.C.'s Plan*, which is the province's action plan for climate change. The plan builds upon the significant investments already made in clean energy, infrastructure and forestry.
- The *Integrated Pest Management Act* and the Integrated Pest Management Regulation came into effect on December 31, 2004. The Act and Regulation streamline the way in which industry manages pesticide application through the use of a results-based, long-term planning process. This streamlined approach will help protect human health and safety and make more efficient use of ministry resources.

January 2005

- The Province announced the addition of 125 collection sites where motorists can drop off used oil, oil filters and containers. With these new sites, British Columbia now has more than 500 return collection facilities that accept, with no charge, used oil, oil filters and containers. The products are sent from these facilities for recycling.
- The Province provided more than \$55,000 to support partnerships that will boost conservation and recreation on northern Vancouver Island and throughout British Columbia. Funding of \$45,000 will go toward the development of the North Coast Trail, which will add 47 kilometres to the Cape Scott trail system at the northern tip of Vancouver Island. A partnership was also developed between the provincial government and the Wilderness Tourism Association, recognizing the role wilderness tourism operators play in environmental stewardship throughout the province.

February 2005

- The provincial government provided \$70,000 to promote bear awareness and reduce bear-human conflicts. Funding of \$55,000 will help communities participate in the provincial Bear Smart program, which encourages communities, businesses and individuals to work together to address the causes of bear-human conflicts. The Province also invested \$15,000 in Wild About Bears, a new program to improve bear awareness among public school students in British Columbia.
- The Province established the B.C. Conservation Corps, a new program aimed at developing new conservationists by getting students and recent graduates motivated about conservation. The corps is a long-term program of the ministry's and will be supported by initial funding of \$9 million over the next three years. Up to 150 students and recent

graduates per year will work to maintain and enhance the diversity of the province's ecosystems, fish and wildlife populations and habitats, and our world-class parks and protected areas system, which are key environmental priorities identified by government and the ministry.

March 2005

- The ministry received a \$7.8 million increase in its budget to build on its progress in habitat and wildlife protection and restoration projects across the province. Funding of \$6.5 million will go toward the Habitat Conservation Trust Fund's endowment and Public Conservation Assistance funds and to complete a multi-partnered purchase of over 4000 hectares of critical wildlife habitat in the Kootenays. The remaining \$1.3 million will be used to fund conservation research grants at post-secondary institutions.
- The provincial government, The Nature Trust of British Columbia and Weyerhaeuser Company Ltd. reached an agreement to nearly double the size of MacMillan Provincial Park. This will increase the park's size to 280 hectares and build on H.R. MacMillan's 60-year legacy of conserving an example of old growth forest.
- The provincial government has increased the number of conservation officers (COs) working in communities to enhance protection for bears and residents. One CO will work in Whistler on a bear aversion program. Two other COs will be based in the District of North Vancouver to deal with problem bears and help educate citizens in the best ways to handle wandering bears in their neighbourhoods. These officers will work during periods of maximum black bear activity, such as the spring and fall months, under a cost-sharing arrangement between the Province and the district.
- The Province invested \$1.2 million to hire 12 additional water specialists to focus on groundwater and surface water protection. These specialists will be located throughout the province and will work closely with local government, health officials, water suppliers and the well-drilling industry to further protect and manage British Columbia's water supplies and ensure their safety.
- The Province announced an investment of more than \$20 million over the next three years to upgrade provincial park facilities, which will improve the camping and day-use experience for park visitors. The money will fund improvements to facilities such as campgrounds, water systems and trails in parks.
- BC Parks will hire 26 new park rangers who will be strategically deployed across the province, focusing on seasons and regions where the need is greatest. In addition, 28 existing rangers will have their positions extended, increasing their presence in parks around the province.
- An agreement between the provincial government, the Capital Regional District (CRD) and The Land Conservancy (TLC) of British Columbia will expand Burgoyne Bay Provincial Park on Saltspring Island and see the creation of a new regional park in Sooke. The provincial government will buy 151 hectares on Saltspring Island from the CRD and, in turn, the CRD will use the proceeds of the sale to buy 85% of the 63-hectare Sooke Potholes property from TLC.

Ministry Role and Services

Vision, Mission and Values

Vision

The ministry's vision is a clean, healthy and naturally diverse environment that enriches people's lives, now and in the future.

Mission

The ministry provides leadership and support to British Columbians to help them limit the adverse effects of their individual and collective activities on the environment, while fostering economic development and providing recreational opportunities.

Values

The ministry plays a leadership role in managing British Columbia's natural resources in an environmentally sustainable manner and in promoting safe, healthy communities. Fulfillment of this role depends on a skilled workforce operating in an innovative and accountable culture, an integrated approach to service delivery and an emphasis on shared stewardship.

- We respect our staff and create a healthy workplace that sets and communicates clear expectations, and supports a culture of staff development, recognition, reward and opportunity.
- We ensure that professional accountability and discipline characterize our behaviour.
- We focus on achieving high environmental standards through a culture of continuous adaptation to change.
- We strive to consistently meet agreed-upon client requirements and deliver our services in a transparent, fair and timely manner.
- We are committed to continuous improvement in the environmental management of the province.

Principles

- A sustainable environment is central for providing economic and social opportunities for all British Columbians and is our legacy for future generations.
- A sustainable environment is a naturally diverse environment.
- All sectors of society are responsible for ensuring a sustainable environment — government, business, industry and citizenry.
- Citizens have the right to safe, healthy communities.

Our values and principles guide us in the attainment of our goals and are reflected in our objectives and the performance measures we have developed to gauge our success in meeting them.

Ministry Overview, Core Business Areas and Structure

Ministry Overview

The mandate of the Ministry of Water, Land and Air Protection is to protect and enhance the quality of British Columbia's water, land and air in a way that contributes to healthy communities, recreational opportunities, a sustainable environment, and a strong and vibrant provincial economy. The ministry strives to bring an effective, balanced approach to environmental management that optimizes benefits from a healthy economy and retains British Columbia's world-renowned natural beauty and environmental integrity. To accomplish this, the ministry provides leadership, develops innovative legislation and new business models, and promotes effective relationships with clients, such as other government bodies, First Nations, industry, and the range of groups in the environmental community. Our clients also encompass the public at large, small business, users of our parks and recreational services, and our staff.¹

The ministry carries out its mandate through four divisions with more than 900 staff located throughout the following regions of the province: Vancouver Island, Lower Mainland, Thompson, Okanagan, Kootenay, Cariboo, Skeena, Omineca and Peace. Regional staff in the Environmental Protection and Environmental Stewardship divisions work together in regional offices to encourage teamwork and efficiency. Smaller area offices are located throughout the province to provide education and compliance activities, and park operations capacity in local areas (see Appendix F: Ministry Office Locations).

The ministry has three major areas of activity:

- **Environmental Protection** — Protection of water, land and air quality, including the appropriate response to climate change and environmental emergencies. The ministry develops policy and legislation, regulations, codes of practice and administers statutes. Regulatory frameworks allow the ministry to set and report on standards for environmental quality, such as discharges and emissions to water, land and air. Frameworks are also used for the acceptable remediation of contaminated sites and facilitation of effective responses to high-risk environmental and human health and safety emergencies.
- **Environmental Stewardship** — Stewardship of biodiversity, including wildlife, fish and protected areas. The ministry sets results-based objectives and standards informed by science for activities that affect ecosystems, species and habitat. It also monitors and reports on selected species and habitats, and acquires information on habitat and species health.
- **Outdoor Recreation** — Park and wildlife recreation management, including hunting, angling and wildlife viewing. The ministry supports the social, economic and cultural

¹ Two other agencies have mandates closely aligned to that of the ministry. The Ministry of Sustainable Resource Management is responsible for land use planning and land-related information services. Land and Water British Columbia (a Crown corporation) is in charge of issues related to land and water allocation, while the Ministry of Water, Land and Air Protection has responsibility for issues related to land and water quality.

values associated with recreational and other uses of Crown land by managing key fish, wildlife and habitat activities, as well as managing provincial parks, protected areas and conservation lands.

An overview of the wide range of legislation administered by the ministry is included in Appendix C.

Innovative Service Delivery in 2004/05

The ministry recognizes that effective service delivery and stewardship of the environment requires forging new relationships, building trust, developing new business models and striving for ongoing improvement.

During 2004/05, the ministry continued to support and establish partnerships and streamline processes that will enable it to continue to pursue an innovative approach to service delivery, such as:

- continuing to enact and bring into force significant legislation (e.g., the *Environmental Management Act* and its regulations) designed to streamline the province's environmental legislation and make the best use of ministry resources;
- working in partnership with the federal government to reconstruct the historic Myra Canyon trestles, a major tourism destination;
- continuing to support the Park Facility Operators of B.C. by investing significantly in upgrades to provincial park facilities such as camp sites, trails and water systems;
- developing and negotiating collaborative management agreements with First Nations for protected area management;
- continuing to partner with the Habitat Conservation Trust Fund to further conservation, habitat restoration and enhancement projects in British Columbia;
- working in partnership with local governments, conservation groups and the community to preserve significant wetlands such as Codd Wetland;
- working in partnership with the B.C. Water and Waste Association and others to bring together experts in water resource management and related disciplines from government, the private sector and academia;
- working in partnership with the B.C. Conservation Foundation to provide employment opportunities and enhance environmental awareness through programs such as the B.C. Conservation Corps, in which young people are mentored by ministry staff as they work on projects such as trail building and public outreach;
- continuing to support the role of government-recognized, private-sector environmental professionals in addressing contaminated sites;
- working in partnership with the conservation sector to establish the B.C. Trust for Public Lands in support of biodiversity conservation;
- continuing to partner with other ministries (e.g., Ministry of Agriculture, Food and Fisheries, Ministry of Transportation) in areas such as aquaculture compliance and highway operations and their impact on the environment;

- supporting community-based projects to improve the province's air quality (e.g., education and research projects and the development of regional airshed plans);
- continuing to work to harmonize regulatory requirements with other governments (e.g., working with the Alberta government on approaches to streamlining and harmonizing permit processing).

In addition to these partnerships and collaborative efforts, the ministry continues to use internal committees to facilitate the effective integration of operations in areas such as science, monitoring and reporting, compliance and information systems planning. (The Ministry of Sustainable Resource Management is an important partner in the implementation of a multi-year information systems plan.)

Ministry representatives also are continuing their participation in a number of cross-government initiatives, such as the Climate Change Strategy, Sea to Sky Review (2010 Olympics), Inter-agency Working Group supporting the B.C. Resort Task Force, Fire Management Team, Mountain Pine Beetle Stewardship Group, Inter-Ministry Invasive Plant Committee and the Drought Task Force. The ministry also remains part of the Ministry of Sustainable Resource Management's Land Information B.C. Client Council (a key provider of information services and information technology to the Ministry of Water, Land and Air Protection).

Core Business Areas

The ministry relies on four core business areas to achieve its goals and objectives.

1. Environmental Protection

This core business area is led primarily by the Environmental Protection Division. Key programs and services focus on protecting human health and the environmental quality of water, land and air. Key functions aim at maintaining high environmental standards by: regulating and monitoring industrial and community activities to ensure compliance; promoting sustainable environmental practices in communities through partnerships and education on best management practices; and maintaining a system for air and water quality monitoring and reporting.

In 2004/05, approximately \$54,243,000 and 342 FTEs were dedicated to this core business area.

One of the major focuses of this business area over the past year has been developing new legislation. Examples include: the bringing into force of the *Environmental Management Act* and the subsequent implementation of its regulatory amendments, codes and protocols; the approval of Phase 1 of the Ground Water Protection Regulation under the *Water Act*; and the Waste Discharge Regulation. Such legislative changes continue to facilitate outcome-based regulations that provide clear roles for governments and stakeholders, consistent performance standards, updated fee structures, decreased remedial and legal costs, and a greater focus on those not complying with regulatory requirements. Providing opportunities

for industry-led stewardship programs for the disposal of post-consumer products and shifting the responsibility for lower risk spills to industry and partners continue to enable the ministry to better focus its resources on high-risk issues.

2. Environmental Stewardship

This core business area is led primarily by the Environmental Stewardship Division. Key programs and services focus on working with other ministries, industries, communities and governments to establish standards for the use and protection of species and habitats. Key functions focus on shared stewardship and sustainable economic development and are aimed at maintaining and restoring fish and wildlife species and their habitats.

In 2004/05, approximately \$57,377,000 and 337 FTEs were dedicated to this core business area.

The ministry continues to work with partners to update provincial regulations and strengthen the role of science professionals in developing standards and best practices for ecosystem, species and habitat conservation. In 2004, the government made a significant contribution in support of the collaborative development of a biodiversity strategy to guide public and private sector activities. Amendments to the *Wildlife Act* will also enhance the government's ability to protect and recover species at risk. In 2004/05, the ministry continued to use legislation such as the *Forest and Range Practices Act* and its regulations, the *Wildlife Act*, the *Park Act* and the *Protected Areas of British Columbia Act* to protect critical habitat and enable results-based stewardship.

3. Park, Fish and Wildlife Recreation

This core business area is also led primarily by the Environmental Stewardship Division. Key programs and services focus on the provision of recreational opportunities in provincial parks and protected areas, allocation of natural resources for hunting, angling and wildlife viewing, protecting recreational values and encouraging recreation-linked economic activity. Key functions include enhancing recreational services using an approach informed by science to promote the effective management of fish, wildlife and park resources; providing park, fish and wildlife recreational services and opportunities for British Columbians and others; and establishing legislation, policies and procedures for park, fish and wildlife recreation.

In 2004/05, approximately \$27,116,000 and 162 FTEs were dedicated to this core business area.

In 2004, the government introduced amendments to the *Park Act* and the *Protected Areas Act* that will expand the provincial parks system and boost tourism. Key partnerships were further supported in 2004/05 by the government's commitment to invest in significant upgrades to park facilities. These improvements, which will be funded by the ministry, will help park operators in their efforts to maintain facilities and enhance visitors' outdoor recreation experiences. The B.C. Conservation Corps, administered jointly by the ministry and the B.C. Conservation Foundation, will also help enhance and protect the environment.

Over the coming years, the ministry will continue to respond to the Recreation Stewardship Panel's recommendations to further support responsible tourism growth. The 2010 Olympic and Paralympic Winter Games will provide an opportunity to encourage sound environmental planning and infrastructure development associated with the Games. The ministry will continue to promote fish, wildlife and park-based recreation and appropriate development within the province's parks to encourage further regional economic opportunities.

4. Executive and Support Services

This core business area is led through the Deputy Minister's Office, Strategic Policy Division and Corporate Services Division. Key programs and services in this business area focus on providing effective planning and legislative support to assist core business areas in achieving their objectives.

In 2004/05, approximately \$21,874,000 and 106 FTEs were dedicated to the core business areas of Executive and Support Services.

In 2004/05, this business area continued to support key ministry initiatives, such as streamlining legislation and encouraging cooperation for stronger environmental protection (ongoing work through bilateral agreements with Idaho, Montana and Washington states). The ministry will continue to support legislative reform and improve critical information systems to enhance client service and monitoring. Efforts will also focus on further integrating the ministry's planning processes, identifying risks and reporting environmental trends to the public.

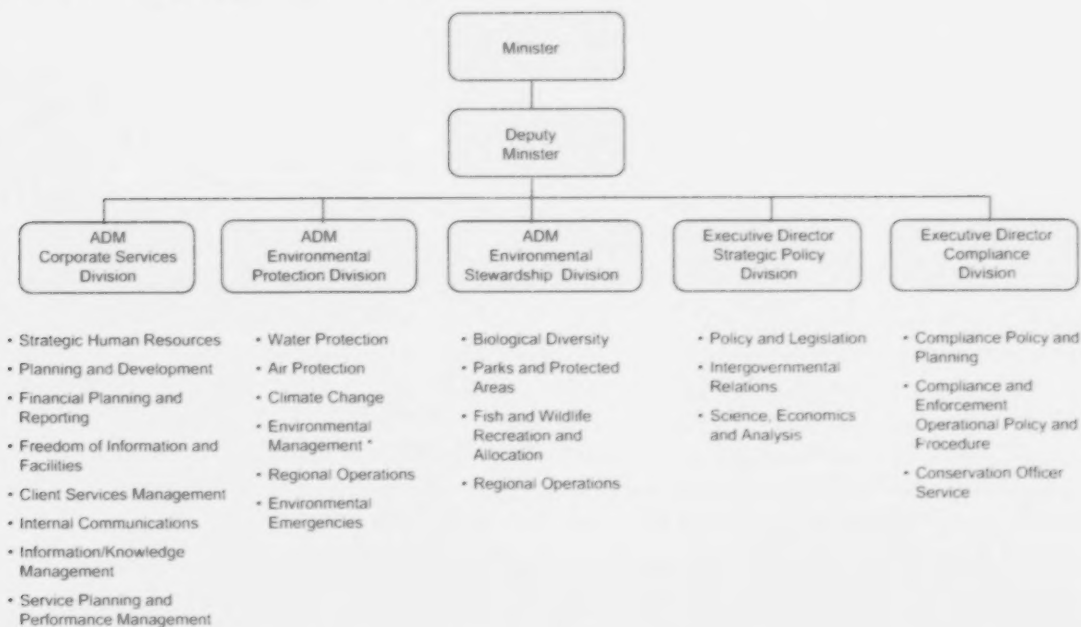
Ministry Organizational Structure

The ministry's structure supports the services, programs, regulatory reform and other initiatives carried out in each core business area. Figure 1 below shows the ministry's organizational chart and the main responsibilities of each division.

Compliance Operations

This new core business area was established at the end of the 2004/05 fiscal year. It provides support to the Environmental Protection Division and the Environmental Stewardship Division. Key programs and services in this business area address a range of education and compliance-related activities, including policy and planning and those of the Conservation Officer Service (COS). This area provides education to help citizens be better stewards, promotes understanding of and compliance with regulatory requirements, conducts inspections and, when needed, works within ministry programs on a range of enforcement options.

Figure 1. Ministry organizational chart



* Environmental Management includes product stewardship, industry and local government emissions and discharges, hazardous wastes, floodplain and dike safety, and contaminated sites.

Ministry Operating Context

The ministry's service delivery is influenced both by government priorities and by trends in the environment, economy and society. How the ministry's strategic goals align with the government's priorities are presented at the beginning of the Report on Performance section. A regular review of the external factors that shape the context in which the ministry must operate provides the ministry the opportunity to continually refine its strategic direction and improve its business planning methods. Adjustments to Service Plan objectives, program priorities, targets and internal budget allocations may result from our analysis of a range of factors, such as the degree of economic activity in the province, the impact of changing weather patterns or international market demands.

The ministry operates within a complex environment that is influenced by many factors, such as:

- *An increasing number of severe and unpredictable natural or biological events that can impact ecosystems, human health, and local, national, or international economies.* For example, an outbreak of the Avian Flu last year affected the poultry industry in the Lower Mainland, and the ministry was part of an inter-agency team to work to eliminate this disease in the province.

- *Rapid population and urban growth in the province that places pressure on habitats, communities, and resources.* The ministry has responded to this issue through a number of avenues, from introducing measures for increased drinking water protection, to increasing funding for invasive weed control, and to developing regulations and environmental reporting that are region-specific. For example, the ministry is currently working on a State of British Columbia's Coast and Marine Environment Report in partnership with others.
- *The need to apply multi-disciplinary approaches to problems, considering scientific, social and economic factors.* As an example, the ministry uses an internal committee structure to facilitate the effective integration of its activities and to improve its decision-making and accountability, involving staff from a variety of disciplines and job functions.
- *Prevailing economic conditions and the recognition that the economy and the environment are linked.* The ministry acknowledges the role that a healthy environment plays in supporting the economy, and the role that a healthy economy has in supporting government's ability to deliver its environmental and other goals. For example, the British Columbia economy grew 3.9% in 2004, leading all provinces, after growth of 2.5% in 2003. This growth and a budget surplus has allowed for increased investments in some of the ministry's priorities.
- *Public expectations that legislation and regulations should be both effective and efficient in achieving objectives.* Public confidence comes from the belief that legislation and regulations are well designed, minimize duplication, have the flexibility to adapt to new circumstances, and will encourage compliance while not unduly burdening stakeholders with unnecessary process and cost. Public confidence comes from the knowledge that the ministry carries out periodic program reviews, audits and assurance pilots to enhance its ability to deliver services, develop effective legislation and business practices and report on its performance fairly and openly.

The 2004/05 – 2006/07 Service Plan indicated that the ministry's budget was expected to continue to stabilize over a three-year period. However, ongoing success in achieving the ministry's mandate also requires effectively addressing issues that may affect its capacity to serve its clients. During 2004/05, the ministry continued to address capacity issues in the following ways:

- *Implementation of new business models.* The ministry continued to work on establishing new business models to improve service delivery and make more efficient use of ministry resources. Efforts continued to develop an effective model for identifying and remediating contaminated sites in British Columbia. In April 2004, the ministry introduced a simplified application and administrative process for permits and commercial licences through the centralized Permit and Authorization Service Bureau.
- *Effective leadership and a skilled workforce.* The ministry invested in the training of its middle managers through a series of Management Fundamentals workshops. Investments were also made in staff training to reorient skills to meet the ministry's changing requirements. In response to concerns about workforce demographics, the ministry continued to enhance its succession planning efforts to manage key ministry positions and knowledge retention issues. As well, the ministry established the B.C. Conservation Corps, which engages students' and recent graduates' interest in conservation activities.

The Conservation Corps will focus on key environmental priorities identified by ministry staff.

- *Shared stewardship.* During the year, the ministry continued to develop partnerships and stakeholder relationships. The ministry also worked with other jurisdictions on the harmonization and streamlining of regulatory requirements (e.g., permit processing). These efforts will encourage collaborative approaches and consistent action for addressing environmental issues.
- *Modernized legislation and streamlined processes.* The ministry continued to develop and bring into force several pieces of legislation, such as the *Integrated Pest Management Act* and the *Environmental Management Act*. Such regulatory change will help clarify the responsibilities of industry, local government and other stakeholders and allow the ministry to focus its resources on high-priority issues.
- *Investments in information technology.* In 2004/05, the three-year Information Management and Information Systems Plan was developed. This plan is focused on enabling the ministry to carry out key business functions and initiatives related to its mandate.

Risk Management

The ministry remains an active proponent of risk management and has considerable experience in examining risks related to human health, the environment, public and private property, Crown assets and its own business operations. During 2004/05, the ministry continued to manage external and internal risk factors. Appendix D: Risk Identification and Ministry Response is an overview of a variety of potential risk factors identified by the ministry and the risk management activities needed to address them.

Strategic Shifts and Significant Changes in Policy Direction

As noted in this and past annual reports, the ministry has made significant strides in changing its business practices and shifting its strategic direction:

From	To
Ministry as sole protector of the environment.	Shared stewardship — sharing responsibility for the environment with others as appropriate and emphasizing a ministry staff culture of client service.
Prescriptive approaches using prohibitions and controls.	Setting appropriate environmental standards, and ensuring standards are met.
Unclear accountability for environmental results.	Clear roles for ministry, industry and other stakeholders in the gathering and reporting of environmental information and achieving environmental objectives.
Well-developed but single-focus ministry initiatives.	Integrated ministry program delivery based on best available science and an ecology-based approach.

This change in direction continues, and the ministry has responded to the challenge of such strategic change by:

- developing partnerships to protect species and habitat;
- streamlining legislation to both protect the environment and contribute to economic development;
- developing innovative business models;
- adjusting its core business area structure (e.g., adding Compliance Operations) to continue to deliver on key initiatives;
- refining its results reporting to focus on a few key measures that link to environmental and operational outcomes.

New Era Commitments

In 2001, the government set out key priorities for the ministry, including a list of *New Era* commitments. Since that time, the ministry has made significant progress in fulfilling these commitments, beginning or completing work on all nine *New Era* commitments involving the ministry. The ministry has also made progress toward completing other key projects as directed to the Minister.

Some of the ministry's accomplishments in 2004/05 include:

- Phase 1 of the Ground Water Protection Regulation was approved by the government under the *Water Act*.
- Creation of 37 new Class A parks and one ecological reserve and expansion of 34 existing Class A parks and four ecological reserves.
- Funding provided to the Habitat Conservation Trust Fund for conservation, habitat restoration and enhancement projects.
- Ongoing support for communities who are developing or about to develop regional airshed plans.
- Additional funding for the Living Rivers initiative, which is administered by the Vancouver Foundation.
- Approval of the Recycling Regulation and increased number of used oil recycling facilities across the province.
- Amendments to a number of Acts to enable the transfer of land to the federal government and allow the establishment of the Gulf Islands National Park Reserve.
- Amendments to the *Wildlife Act* that enhance the government's ability to designate and protect species at risk in British Columbia.

For more information about the ministry's progress in addressing the government's *New Era* commitments see Appendix B: Progress on *New Era* Commitments and Key Projects.

Report on Performance

Overview of Ministry Goals and Linkage to Government Strategic Goals

In early 2002, the government completed its Core Review of all ministries. The Core Review provided direction on three major areas of action for the ministry:

- Environmental Protection — shift to results-based regulation, industry responsibility and market incentives.
- Environmental Stewardship and Conservation — shift to results-based regulation and focus on priority ecosystems for protection.
- Outdoor Recreation — increase partnerships and private-sector involvement and move toward market-rate fees for service.

This direction, in conjunction with the ministry's mission and the government's strategic goals, is the foundation for the ministry's strategic direction.

Government Strategic Goals

The government's Strategic Plan is the guiding document for all government ministries. It outlines the government's goals for the province's economy, social fabric, communities and physical environment. It is the umbrella plan under which ministry service plans are developed. The government has set three strategic goals to support its vision of British Columbia as a "prosperous and just province, whose citizens achieve their potential and have confidence in the future." These goals are:

1. A strong and vibrant provincial economy.
2. A supportive social fabric.
3. Safe, healthy communities and a sustainable environment.

Ministry Strategic Goals

Under the government's Strategic Plan, the ministry is assigned the most accountability for achieving the government's objectives under Goal 3. However, all of the ministry's goals support the government's vision, values and strategic direction. These goals are:

1. Protect the environment and human health and safety by ensuring clean and safe water, land and air.
2. Maintain and restore the ecological diversity of fish and wildlife species and their habitats.
3. Provide and enhance park, fish and wildlife recreational services and opportunities for British Columbians and others.
4. Provide effective and efficient planning and support for ministry programs.

Over the past three years, the ministry has made considerable progress in meeting these goals and supporting the government's strategic direction by encouraging effective partnerships to protect the environment and by promoting economic renewal.

Report on Results

Each of the ministry's goals is supported by a set of objectives that shape ministry programs and activities and aim at achieving longer-term outcomes. These objectives are supported by strategies, which are developed within each program area. The strategies show the general approach the ministry is taking to achieve its objectives. Goals, objectives and strategies are updated as key initiatives are completed, new priorities evolve, innovative business models are developed or clarification is needed for public understanding.

To monitor our progress toward meeting the goals, the ministry has developed a set of performance measures. These measures are intended to provide a balance of outcome and output measures. Targets are set by programs based on historical accomplishment, government priorities and availability of resources.

For some measures, targets were set for years beyond the 2004/05 reporting year, and therefore were not specified in the ministry's 2004/05–2006/07 Service Plan. As well, since the publication of the Service Plan, some measures have been discontinued. However, for completeness, Figure 2 shows how all of the ministry's goals, objectives and performance measures were linked in 2004/05. The following section provides further explanation of the measures and their results.

Figure 2. Synopsis of Ministry results

Ministry Goals	Ministry Key Objectives	Measures/Targets	Results
1. Protect the environment and human health and safety by ensuring clean and safe water, land and air.	→ 1. Streamline standards and improve monitoring, reporting and compliance.	Contaminated sites backlog reduction. Average processing time for permits. Pesticide certification processing time.	→ 04/05 target not specified. Data not available. Target met.
	→ 2. Limit air pollution and contribute to British Columbia's efforts to respond to climate change.	Percentage of communities achieving Canada-wide standard for particulate matter (PM _{2.5}). Per capita greenhouse gas emissions relative to other provinces.	→ 04/05 target not specified. Target met.
	→ 3. Ensure safe, high-quality drinking water and reduce discharges that threaten water quality.	Water quality trends.	→ 04/05 target not specified.
	→ 4. Reduce/remove toxins and wastes that contaminate land.	Products with industry-led product stewardship.	→ Target not met.
	→ 5. Effective response to high-risk environmental emergencies.	Response to environmental emergencies.	→ Target met.
2. Maintain and restore the ecological diversity of fish and wildlife species and their habitats.	→ 1. Clear strategies and legislation to protect and restore species and their habitats.	Designations established under the <i>Forest and Range Practices Act</i> .	→ WHA: Target exceeded. UWR: Target substantially achieved.
	→ 2. Improved use of science for the development of standards and for effective monitoring and reporting.	Percentage of known native species threatened or endangered in the province.	→ Data not available until 2006.
	→ 3. Increased number of partnerships to conserve species and their habitats.	Number of collaborative management plans with First Nations.	→ Target partially met.
3. Provide and enhance park, fish and wildlife recreational services and opportunities for British Columbians and others.	→ 1. High-quality park facilities, services and recreational opportunities.	Visitor satisfaction with park and campground facilities and services.	→ Target met.
	→ 2. High-quality hunting, angling and wildlife viewing opportunities.	Client satisfaction with fish and wildlife opportunities.	→ Not applicable.
	→ 3. Optimize the economic contribution of park, fish and wildlife recreation.	Number of hunting and angling licences sold. Number of recorded visits to B.C. parks.	→ Hunting: Target met. Angling: Target substantially achieved. 04/05 target not specified.
4. Provide effective and efficient planning and support for ministry programs.	→ 1. Clear vision, leadership, direction and support for all ministry programs.	Regulatory reform targets. Risk management implementation.	→ Target exceeded. Base data identified.
	→ 2. Efficient program management, fiscal responsibility and client service.	Percentage of staff with an Employee Performance and Development Plan (EPDP). Workplace wellness survey.	→ Target substantially achieved. Target met.

WHA = Wildlife habitat areas. UWR = Ungulate winter ranges.

Goal 1: Protect the environment and human health and safety by ensuring clean and safe water, land and air.

Clean and safe water, land and air support healthy communities and the economy in British Columbia. This goal reflects the ministry's commitment to developing results-based environmental standards and workable regulation, protecting air and water quality and enabling the removal of contaminants from land.

Core Business Area: Environmental Protection

Objective 1: Streamline standards and improve monitoring, reporting and compliance.

The ministry has been shifting from a prescriptive approach to environmental regulation to a results-based approach informed by science and is streamlining standards and processes to remove unnecessary impediments to business and to foster economic development. The ministry is working to change some of its processes, clarify regulatory requirements and improve the use of science for informing decision-making.

Key Strategies

The 2004/05 – 2006/07 Service Plan identified the following strategies for this objective:

1. Reduce prescriptive regulatory requirements to decrease costs and processing time, and allow flexibility in the methods used to achieve environmental standards.
2. Revise legislation and associated regulations to enable implementation of innovative and results-based approaches.
3. Amend legislation and focus ministry efforts to ensure effective clean-up of previously contaminated sites that pose a high risk to human health and the environment.
4. Update the scientific information used to develop guidelines and standards for environmental protection.
5. Implement an effective data collection process and information network that supports air and water quality monitoring, tracks trends and provides for transparent progress reporting.
6. Maintain regulatory activities to monitor achievement of standards.
7. Work in partnership with stakeholders to develop new compliance tools, such as stewardship initiatives, which prevent violations and result in higher rates of compliance.

Performance Measure and Results

Reduction in backlog of applications for medium- and low-risk contaminated sites.

Performance Measure	2004/05 Target	2004/05 Actual	2004/05 Variance
Reduction in backlog of applications for medium- and low-risk contaminated sites.	Eliminate 95 % of the backlog by March 31/06.	Most of the backlog of applications eligible for the roster review process has been eliminated.	None — target not specified for 2004/05.

Source: Ministry of Water, Land and Air Protection.

Benchmark/Explanatory Information: At the beginning of 2003/04, the backlog was estimated to consist of approximately 150 contaminated site applications.

Rationale for the Performance Measure

A key objective of the ministry's recent legislative and regulatory changes was to enable more timely decisions on applications from businesses. As indicated in the Premier's letter to the Minister in the 2004/05 – 2006/07 Service Plan, a priority for the ministry is to eliminate contaminated sites regulatory backlogs within 24 months (i.e., by March 31, 2006). This performance measure was introduced to monitor the reduction in the backlog of applications for low- to moderate-risk contaminated sites.

Achievements and Key Issues

The ministry has placed a high priority on reducing the contaminated sites application backlog and, as a result, most of the applications for low- to moderate-risk sites that were in the backlog have been addressed.

Considerable progress was made in 2004/05 to improve the regime for contaminated sites administration, including the coming into effect of the *Environmental Management Act* and related regulatory changes, as well as changes to approval processes. Effective November 1, 2004, all applications for low- to moderate-risk sites must be reviewed by an approved professional (i.e., someone selected from a government-established roster of private-sector environmental professionals) prior to being submitted to the ministry. This new requirement will reduce the time required by the ministry to handle new submissions for low- and moderate-risk sites and will enable staff to focus their efforts on addressing high-risk sites and issues.

Currently, the ministry's turnaround time for 90% of applications that use the roster-submission process is one to two weeks. One out of ten roster submissions is subject to a detailed quality review or "audit" to ensure an ongoing high level of performance by approved professionals.

Future Direction

The ministry is currently working with the Roster Steering Committee, which is responsible for administration and management of the roster of approved professionals, and with

the Science Advisory Board for Contaminated Sites to expand the number of approved professionals as well as the scope of applications that they can review.

The ongoing efforts to streamline the contaminated sites regulatory regime will enable further reductions in processing times for contaminated sites applications.

Performance Measure and Results

Average processing time for issuing permits, compared to Alberta.

Performance Measure	2004/05 Target	2004/05 Actual	2004/05 Variance
Average processing time for issuing permits, compared to Alberta.	Match Alberta 90% of the time by March 31/05.	Base data not available.	Base data not available.

Source: Ministry of Water, Land and Air Protection.

Benchmark/Explanatory Information: Not available.

Rationale for the Performance Measure

The ministry is streamlining, where practical, the regulatory requirements perceived as an impediment to economic development and diversification of regional economies in British Columbia. This will result in consistent processing standards, encourage greater compliance and enforcement and result in lower costs to government and industry. Efforts to align environmental management approaches between British Columbia and Alberta are currently underway. This performance measure was introduced in the 2004/05 – 2006/07 Service Plan to assess the average processing time for issuing similar permits in British Columbia compared to Alberta.

Achievements and Key Issues

Base data for this performance measure are not yet available. Due to progress on two broader initiatives described below that have implications for the ministry's permit requirements and related processing times, it is not yet clear what base data would be appropriate for this measure.

As has been indicated in previous ministry Service Plans and Annual Service Plan Reports, the bringing into effect of the *Environmental Management Act* in the summer of 2004 and the subsequent implementation of regulatory amendments, codes and protocols are expected to result in significant changes to the environmental management regulatory regime. This will impact the operations and activities that are required to have permits, as well as the overall permitting processes. These changes are expected to decrease processing times for permits and other authorizations.

After signing a Memorandum of Understanding on May 26, 2004, British Columbia and Alberta are working to develop a better understanding of the environmental management approaches used by each jurisdiction. This work aims at determining the similarities and

differences between approaches and to identify and prioritize harmonization opportunities. Permit processing is one of several areas that are being considered for harmonization.

Providing a meaningful comparison of permit processing times requires that both jurisdictions have similar permit requirements for specific operations and activities. Given the regulatory reviews and changes underway in both British Columbia and Alberta, efforts to acquire data for this measure will focus on the areas in which there will be similar permit processing requirements following the changes to the regulatory regimes.

Future Direction

The ministry will continue working to streamline permit requirements and processing so that they do not cause unnecessary costs or delays for permit applicants. Work will also continue to identify areas where harmonization of permit processing with Alberta would be beneficial.

Performance Measure and Results

Turnaround time for pesticide certification.

Performance Measure	2004/05 Target	2004/05 Actual	2004/05 Variance
Turnaround time for pesticide certification.	2 weeks	2 weeks	Target met.

Benchmark/Explanatory Information: Users and sellers of pesticides, who are employed as "certified" applicators or dispensers, as required by provincial pesticide regulations, must pass the appropriate examination prepared by the ministry. In 2003/04, the typical turnaround time for receiving examination results was at least six weeks.

Rationale for the Performance Measure

Applicators and dispensers of pesticides are required to be certified and candidates must pass the appropriate examination. In past years, candidates were required to wait at least six weeks for their examination results. This was viewed as excessive for candidates whose jobs depended on certification. In conjunction with the development of the *Integrated Pest Management Act*, the process for examination delivery was reviewed and streamlined with the intent to reduce the typical turnaround time to two weeks. This performance measure was introduced in the 2004/05–2006/07 Service Plan to monitor ministry progress in streamlining the approval process for pesticide certification.

Achievements and Key Issues

The ministry has introduced a streamlined approach to delivering examinations for pesticide certification in partnership with the Government Agents office in Nelson. This approach has enabled the ministry to not only meet its target of a two-week turnaround for providing examination results, but has also increased accessibility for those wanting to write the exams.

Future Direction

It is possible that the turnaround time for pesticide certification and other pesticide use authorizations issued by the ministry could be expedited further by incorporating additional electronic approaches to application and issuance. The ministry may explore this in the future.

Objective 2: Limit air pollution and contribute to British Columbia's efforts to respond to climate change.

Protecting the quality of air remains a key component of the ministry's goal to protect the environment and human health. This objective addresses that component of the goal. The ministry is undertaking action in a number of areas related to air quality issues in the province and supports the government's climate change action plan.

Key Strategies

The 2004/05 – 2006/07 Service Plan identified the following strategies for this objective:

1. In partnership with other levels of government, support the development of a climate change strategy and ensure the province's interests are addressed in a national strategy.
2. Encourage incorporation of environmental technology and clean energy into government and other operations.

Performance Measure and Results

Percentage of monitored communities achieving the Canada-wide standard (CWS) quality objective of amount of fine particulates in the air under 2.5 microns per cubic metre ($PM_{2.5}$).

Performance Measure	2004/05 Target	2004/05 Actual	2004/05 Variance
Percentage of monitored communities achieving the Canada-wide standard (CWS) quality objective of amount of fine particulates in the air under 2.5 microns per cubic metre ($PM_{2.5}$).	100% of communities monitored achieve, or continue to achieve, the CWS for $PM_{2.5}$ by 2005/06.	14 out of 16 communities (87.5%) achieved the CWS where $PM_{2.5}$ is monitored and sufficient data are available to generate the statistic (based on 2004 data).	None — target not specified for 2004/05.

Source: Ministry of Water, Land and Air Protection.

Benchmark/Explanatory Information: Comparable data for previous years are: 7 out of 7 communities (100%) in 2000; 9 out of 10 communities (90%) in 2001; 10 out of 11 communities (91%) in 2002; and 13 out of 15 communities (86.7%) in 2003. (Note: Data for 2003 have been revised to reflect the inclusion of an additional reporting station.)

Rationale for the Performance Measure

The outdoor air contaminant of most concern in British Columbia, from a human health perspective, is particulate matter (PM). Particles smaller than 2.5 µm (PM_{2.5}) are believed to pose the greatest health risk. The ministry, in conjunction with regional districts and industry, collects PM_{2.5} data from approximately 60 air quality monitoring sites from over 40 communities across the province. The percentage of monitored communities achieving the Canada-wide standard (CWS) for PM_{2.5} has been selected as the performance measure. Use of this performance measure is designed to help the ministry determine how effectively it is achieving its air quality improvement targets.

Achievements and Key Issues

The results for this measure refer to the percentage of monitored communities that achieve the specified air quality objective. Historically, sampling efforts tended to focus on those areas experiencing air quality problems related to particulate matter. More recently, the focus has been on community-based monitoring in populated areas. As such, trend results should be interpreted carefully to determine if trends reflect actual changes to air quality, changes in the monitoring network, or other factors.

In 2004/05, the ministry continued to support several initiatives related to protecting or improving air quality in the province:

- Funding and regional technical support was provided for airshed activities in Port Alberni, Nanaimo, the Sea-to-Sky airshed, Golden, Nelson, Williams Lake, the Bulkley Valley-Lakes District and Prince George.
- A number of technical studies were continued or initiated to better inform air management decisions at the provincial or airshed level. These studies looked at:
 - improved estimates of air emissions, including the finalization of the year 2000 emission inventory;
 - odour standards used in other parts of Canada and elsewhere;
 - meteorology's role in degraded air quality; and
 - best management practices for application of winter road traction material.
- Stakeholder input was sought as a step toward finalizing a guidance document to assist users of dispersion models.
- Through the Wood Energy Technicians of British Columbia, a total of 22 Burn-it-Smart public awareness workshops were held throughout the province to educate the public on how to burn wood in a safer, cleaner and more efficient manner.

Future Direction

The ministry is working closely with other jurisdictions through the Canadian Council of Ministers of the Environment (CCME) toward improved implementation of the CWS for both PM_{2.5} and ozone. Cooperation with other jurisdictions is essential because air emissions and air quality are trans-boundary issues.

Efforts are ongoing to improve our understanding of PM_{2.5} sources and ambient levels in British Columbia. For example, special studies in Prince George, in addition to ongoing work in Golden, will use the chemical composition of PM_{2.5} samples and other measures to estimate source contributions to ambient PM_{2.5} levels.

Performance Measure and Results

Per capita greenhouse gas emissions relative to other provinces.

Performance Measure	2004/05 Target	2004/05 Actual	2004/05 Variance
Per capita greenhouse gas (GHG) emissions relative to other provinces.	Maintain or improve on ranking (of 3rd lowest emissions per capita in Canada).	3rd lowest emissions per capita in Canada (based on 2002 data).	Target met.

Source: Ministry of Water, Land and Air Protection.

Benchmark/Explanatory Information: Based on 2002 data, British Columbia currently ranks third-lowest in Canada after Prince Edward Island and Quebec in GHG emissions per capita. (Source: *Canada's Greenhouse Gas Inventory 1990-2003*, Environment Canada.) In 2003/04, reporting was based on 2001 data, with British Columbia ranking third-lowest in Canada after Prince Edward Island and Quebec. (Source: Ministry of Water, Land and Air Protection.)

Rationale for the Performance Measure

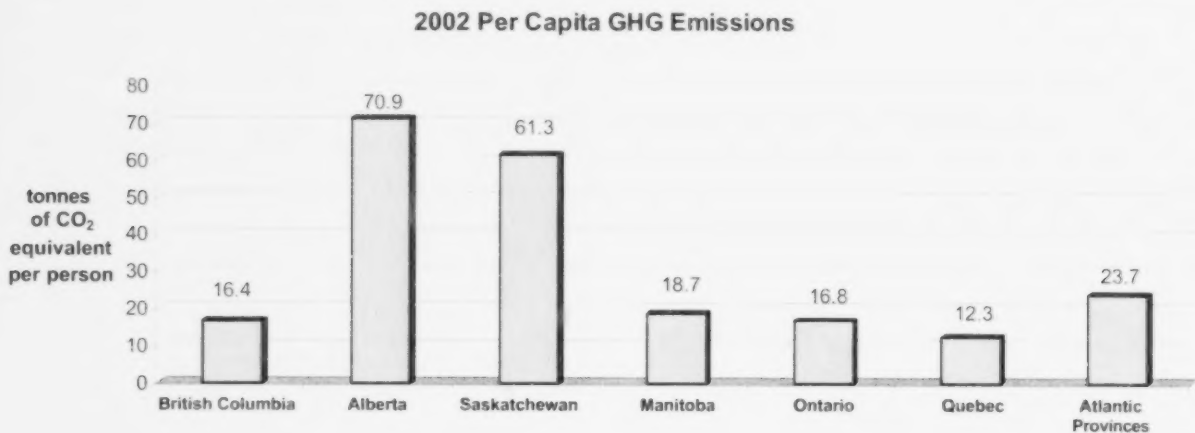
Elevated levels of greenhouse gases (GHGs) in the atmosphere are causing changes to global climates and climate-sensitive physical and biological systems. Reducing emissions on a worldwide scale is expected to slow the rate of climate change, and thus the timing of its impacts.

As stated in the 2003/04 Annual Service Plan Report, the ministry replaced its earlier measure — *total greenhouse gas (GHG) emissions in British Columbia* — with the current *per capita greenhouse gas (GHG) emissions relative to other provinces* outcome measure. This measure was previously selected by the B.C. Progress Board and is considered more appropriate since a per capita measure accounts for the largely unknown effects of future GHG commitments and clean technology development that are likely to apply to all provinces. The target of maintaining or improving on the province's current ranking of third lowest emissions per capita in Canada reflects British Columbia's commitment to keeping pace with, or exceeding, the overall national effort to reduce greenhouse gas emissions.

Achievements and Key Issues

The target was met as British Columbia continues to maintain its ranking of third lowest GHG emissions per capita compared with other provinces based on 2002 data (see Figure 3).²

² It is anticipated that Environment Canada's 2003 data will be released in the summer of 2005.

Figure 3. Per capita greenhouse gas emissions by province

In December 2004, the ministry released *Weather, Climate and the Future: B.C.'s Plan*. This plan responds to and protects the interests of British Columbia. It builds upon the significant investments already made in clean energy, infrastructure and forestry and is complemented by actions already underway to adapt to challenges presented by the mountain pine beetle, forest fires and drought. The list of 40 actions contained in the plan are complemented by specific emissions-related targets for agriculture, buildings, government operations and other sectors. While government plays an important technical role in the development of policy options, industry sectors have a more direct role in making business decisions that can help mitigate climate change.

Future Direction

Ongoing efforts coupled with new initiatives by several provincial agencies, and by numerous other provincial stakeholders, will continue to help reduce greenhouse gas emissions and manage the risks associated with the impacts of climate change.

Objective 3: Ensure safe, high-quality drinking water and reduce discharges that threaten water quality.

This objective addresses the component of Goal 1 that pertains to ensuring clean and safe water. A major priority is to implement strategies such as the one below. In 2004, the ministry enacted Phase 1 of the Ground Water Protection Regulation to ensure that wells are properly constructed, maintained and protected from run-off contamination.

Key Strategy

The 2004/05 – 2006/07 Service Plan identified the following strategy for this objective:

1. Protect surface water and groundwater from health-threatening contamination by implementing groundwater regulations.

Performance Measure and Results

The trends in environmentally significant variables, such as metals and nutrients, that indicate the health of water for 30 water bodies monitored under federal/provincial agreement.

Performance Measure	2004/05 Target	2004/05 Actual	2004/05 Variance
The trends in environmentally significant variables, such as metals and nutrients, that indicate the health of water for 30 water bodies monitored under federal/provincial agreement.	Maintain or improve water quality trends for water bodies monitored under the federal/provincial agreement by 2006.	96% of the monitoring stations in the 30 water bodies have stable or improving water quality trends (in 2004/05).	None — target not specified for 2004/05.

Source: Ministry of Water, Land and Air Protection.

Benchmark/Explanatory Information: The result for this measure was 90% in 2002/03 and 2003/04. In addition to the 30 stations funded under the Canada-B.C. Water Quality Monitoring Agreement, the ministry uses water quality data from approximately 150 other community-based stations on other water bodies. This number compares with Ontario's 200 stations for monitoring the water quality of streams and rivers. (Source: Agriculture and Agri-Food Canada. 2000. Research Branch. *The Health of Our Water: Toward Sustainable Agriculture in Canada.*)

Rationale for the Performance Measure

British Columbia has 25% of the flowing freshwater resources in Canada. Protecting water quality requires ongoing efforts to monitor, protect and manage water resources on both province-wide and watershed-specific levels. This performance measure focuses on trends in surface water quality for 30 water bodies measured under the federal/provincial agreement. This outcome measure monitors trends based on environmentally significant variables, such as metals and nutrients. Tracking such trends will indicate the cumulative effect of multi-agency land use activities and resource management activities in source watersheds. This information helps inform how performance standards, authorizations and further monitoring activities are established for water bodies in the province.

Achievements and Key Issues

The target is for water quality trends in the monitored water bodies to be maintained or improved by 2006. In 2004/05, 96% of the monitoring stations in the 30 water bodies had stable or improving water quality trends, which is an improvement in the results from the previous year.

Data are collected and reviewed annually for each of the 30 water bodies to assess whether there has been a significant variance from the trend, and each water body is subjected to a detailed statistical analysis approximately every five years. Variances from the trend are usually a result of a significant event or issue and are reviewed further to determine the nature of the event or issue, and if any action is required to mitigate the potential risks to the water body.

Future Direction

The results reported for this measure reflect only the trends for variables and water bodies monitored under the federal/provincial agreement. There are also other variables and water bodies that are being monitored. Data from some monitoring stations indicate that the concentrations of some of these other variables, such as chloride, are increasing. This may be the result of human activities, or be related to lower water flows due to lower-than-normal precipitation. Such situations will continue to be monitored.

The ministry is working to improve the efficiency and expand the water-monitoring network. The ministry is revisiting former stations from which monitoring had been suspended for a period of time to ensure that past results remain valid and no new trends are forming. The ministry is also adding new stations to improve the spatial coverage and representativeness of British Columbia's water bodies in the monitoring network.

Objective 4: Reduce/remove toxins and wastes that contaminate land.

This objective addresses the component of Goal 1 that pertains to ensuring clean and safe land. The following strategy continues to be important for ministry effectiveness in attaining this objective.

Key Strategy

The 2004/05 – 2006/07 Service Plan identified the following strategy for this objective:

1. Create a business strategy that enables producers to remove high-risk components from the waste stream and expand the number of products that can be recycled.

Performance Measure and Results

Number of product categories that pose a high risk to the environment with industry-led product stewardship.

Performance Measure	2004/05 Target	2004/05 Actual	2004/05 Variance
Number of product categories that pose a high risk to the environment with industry-led product stewardship.	1 additional product category.	No additional categories added.	Target not met.

Source: Ministry of Water, Land and Air Protection.

Benchmark/Explanatory Information: British Columbia is a recognized leader in industry-led product stewardship with seven product categories (paint, used oil products, beverage containers and four other post-consumer residuals). Many other provinces have only one or two products managed through industry-led product stewardship. In 2003/04, one additional product category was added for a total of seven. (Source: Ministry of Water, Land and Air Protection.)

Rationale for the Performance Measure

Many provincial and international jurisdictions are encouraging development of industry-led product stewardship programs in order to expand producer responsibility for the treatment or disposal of post-consumer products. Efforts tend to focus on reducing waste from product categories that pose relatively high risks to the environment. Hence, this measure of the number of product categories with industry-led product stewardship should be a reasonable indicator of success in attaining the objective.

This performance measure is easy to monitor at minimal cost. One limitation, though, is that the ministry is not solely responsible for attaining the targets related to this measure, and so cannot be totally accountable for its achievement. Performance targets are based on the expected lead time for industry-led product stewardship programs to be developed for additional product categories.

Achievements and Key Issues

The target of an industry-led product stewardship program being introduced in 2004/05 for an additional product category was not met. However, the ministry was successful in enacting a single, outcome-based, regulation for all regulated product categories. The Recycling Regulation, which consolidated the Beverage Container Stewardship Program Regulation and the Post-Consumer Residual Stewardship Program Regulation into a single industry stewardship regulation was enacted in the fall of 2004. This regulation provides a framework for all product categories that may be added in the future.

Other successes in 2004 included the role British Columbia had in leading a Canadian Council of Ministers of the Environment (CCME) task group in the development of a set of Canada-wide Principles for Electronics Product Stewardship, to assist and support jurisdictions in the development of e-waste programs. The CCME approved the Principles in the summer of 2004, and established a subsequent Electronics Product Stewardship Task Group, chaired by Environment Canada and consisting of the same members as the first task group. The mandate of the new task group is to promote consistency among jurisdictions in the implementation of the principles. In support of the principle that adjacent jurisdictions will strive for consistency in e-waste products collected, the task group developed a list of potential e-waste products that are most likely to contain toxic and hazardous substances.

The industry-led product stewardship program for recycling used oil that was launched in 2003/04 was expanded in 2004/05. The B.C. Used Oil Management Association, a non-profit, industry-led organization, has set up a network of collectors to pick up used oil materials from more than 4,000 commercial generators and more than 500 collection sites (125 collection sites were added recently). In the first nine months of 2004, the program collected more than 33 million litres of used oil, 3.6 million oil filters and 763 000 kilograms of plastic oil containers. This is a marked increase from the previous year.

Future Direction

Governments and industry across Canada are working together to seek common solutions for dealing with electronic waste. After lead-acid batteries, electronic waste is the second biggest source of heavy metals in landfills, posing new challenges to municipalities.

Now that the ministry has established a single regulatory framework for industry product stewardship, it will continue to work toward bringing new products, such as electronics, under the Recycling Regulation.

Future product categories suitable for industry-led product stewardship or extended producer responsibility will be determined by working with industry, local governments and consumer stakeholders.

Objective 5: Effective response to high-risk environmental emergencies.

Responding to environmental emergencies is an area in which the ministry is implementing its shift to focusing on high-risk issues. This objective pertains to all components of Goal 1, encompassing water, air and land. The ministry is undertaking a range of strategies to achieve this objective.

Key Strategies

The 2004/05 – 2006/07 Service Plan identified the following strategies for this objective:

1. Implement a Flood Hazard Management Strategy to clarify the roles and responsibilities of the provincial government, local governments and others.
2. Respond effectively to high-risk environmental emergencies in conjunction with other ministries, local governments and industry.
3. Expand industry responsibility for response to and clean-up of spills.
4. Test industry, agency and ministry toxic-spill emergency response plans.

Performance Measure and Results

Percentage of high-risk environmental emergencies responded to effectively.

Performance Measure	2004/05 Target	2004/05 Actual	2004/05 Variance
Percentage of high-risk environmental emergencies responded to effectively.	100%	100%	Target met.

Source: Ministry of Water, Land and Air Protection.

Benchmark/Explanatory Information: The proportion of spills responded to by the ministry has declined from nearly 20% before the ministry's transition to focusing on high-risk spills to less than 10% currently. The ministry is working with local governments, industry, emergency response organizations (such as the Canadian Coast Guard), and other partners to improve the effectiveness of the response to all spills. In 2003/04, 100% of high-risk environmental emergencies were responded to effectively. (Source: Ministry of Water, Land and Air Protection.)

Rationale for the Performance Measure

The shift to focusing on high-risk issues is being achieved by increasing the use of partnerships and expanding industry responsibility for responding to low- and medium-risk spills. This outcome measure monitors the ministry's effectiveness in obtaining the objective of responding effectively to high-risk environmental spills, for which it has responsibility to respond. Due to the importance of responding effectively to high-risk spills, the target was set at 100%.

Achievements and Key Issues

In 2004/05, the ministry received 3,501 reports of hazardous materials spills in the province. Of these, 259 were high-risk spills. The ministry responded effectively to 100% of these high-risk events.

Evaluating effectiveness considers several issues, including identifying the spills that require attendance by ministry staff, timeliness of response, addressing the technical issues at the site, effecting proper response by parties responsible for the spill or by others when there is no responsible party, and ensuring appropriate clean-up.

During the last few years, the ministry has made considerable progress toward shifting the responsibility for low- and medium-risk spills to industry, local governments and other partners. The responsible party addressing a low- or medium-risk spill will report how impacts were mitigated to enable further monitoring and evaluation.

Future Direction

The ministry is continuing to monitor the use of the Risk-Based Spill Assessment Model, introduced in 2003, to ensure that it is accurately identifying the high-risk spills. The ministry is also working with local governments, industry, emergency response organizations (such as the Canadian Coast Guard), and other partners to improve the effectiveness of the response to all spills. Local governments are assessing the risk of all emergencies and developing response plans, which must be in place by 2006.

Goal 2: Maintain and restore the ecological diversity of fish and wildlife species and their habitats.

Maintaining and restoring ecological diversity, fish and wildlife species and natural habitats provides environmental, social and economic benefits for all British Columbians. This goal focuses on the development of effective legislation and the improved use of science, and promotes a shared-stewardship approach involving First Nations, other government agencies, stakeholders and communities within British Columbia.

Core Business Area: Environmental Stewardship

Objective 1: Clear strategies to protect and restore species and their habitats.

The ministry continues efforts to focus on environmental outcomes by providing clear direction and certainty for people who must comply with ministry regulations. To achieve this, the ministry develops standards informed by science and clearly identifies expectations and required results.

Key Strategies

The 2004/05 – 2006/07 Service Plan identified the following strategies for this objective:

1. Reduce prescriptive regulatory requirements to decrease costs to government and industry and implement results-based stewardship.
2. Develop a strategy to provide a long-term vision and action plan for managing and conserving ecosystems, species and their habitats.
3. Work with the public, government and industry to identify, protect and restore species and their habitats for the conservation of ecosystems.
4. Provide clear guidelines and standards for appropriate protection and conservation of ecosystems, species and habitats on Crown land outside of the protected areas system.
5. Assess and respond to high-risk threats to ecological diversity (e.g., developing the Okanagan Mountain Park fire research framework) and identify opportunities to protect and restore key habitats within the protected areas system.
6. Undertake park management planning to ensure long-term management of conservation and recreation in parks and protected areas.
7. Streamline the *Wildlife Act* and other legislation, including clarifying the designation categories for parks and protected areas.
8. Maintain monitoring and reporting on the achievement of standards to manage and conserve species and habitats.

Performance Measure and Results

Ministry progress in establishing designations and objectives for fisheries, wildlife and water quality using statutory authorities under the Forest and Range Practices Act.

Performance Measure	2004/05 Target	2004/05 Actual	2004/05 Variance
Ministry progress in establishing designations and objectives for fisheries, wildlife and water quality using statutory authorities under the <i>Forest and Range Practices Act</i> .	An additional 30 WHA and 15 UWR designations approved per year. Targets for March 31/05: 190 WHAs; 30 UWRs.*	Total WHAs and UWRs as of Mar. 31/05: 320 WHA (658,935 hectares); 28 UWR* (2,284,917 hectares).	WHA target exceeded. UWR target substantially achieved.

* Specifies the number of UWR packages; each package may have as few as 1 to more than 1,000 winter ranges. Thus, when monitoring progress in this area, it is important to also consider the amount of area designated.

Source: Ministry of Water, Land and Air Protection.

Benchmark/Explanatory Information: As of March 31, 2003, there were 129 wildlife habitat area (WHA) designations approved (covering 44,233 hectares) and no ungulate winter range (UWR) designations. As of March 31, 2004, there were 160 WHA designations approved (covering 49,120 hectares) and 15 UWR designations approved (covering 913,462 hectares). (Source: Ministry of Water, Land and Air Protection.)

Rationale for the Performance Measure

The *Forest and Range Practices Act* (FRPA) is a critical piece of legislation for protecting and restoring species and their habitats. Therefore, it is important to measure ministry progress in establishing environmental standards under the FRPA. The ministry is assessing its progress under the FRPA by monitoring an output measure of the number of legal designations for wildlife habitat areas (WHA) and ungulate winter ranges (UWR).

Achievements and Key Issues

In 2004/05, an additional 160 WHAs were designated for a total of 320 (covering 658,935 hectares), which substantially exceeded the target of an additional 15 designations. An additional 13 UWRs were designated for a total of 28 (covering 2,284,917 hectares). The UWR target of 15 additional designations for 2004/05 represented a doubling of the number of designations from the previous year. The target number of designations was substantially achieved and the total area established as ungulate winter range more than doubled.

Additionally, the ministry made significant progress in setting results-based environmental standards under the FRPA. Objectives were established for community watersheds and fisheries-sensitive watersheds. Also, licensees are now required to develop their Forest Stewardship and Woodlot Licence plans so that they are consistent with the FRPA's objective for wildlife.

Future Direction

The ministry will continue working to establish designations and objectives in all areas for which the ministry has responsibility under the FRPA. Data and targets for other areas, such as significant community and fisheries watersheds, may be provided as data become available. The ministry will also work to develop a long-term outcome measure and acquire trend data. Once designations are established, the ministry's focus will be on monitoring and reporting.

Objective 2: Improved use of science for the development of standards and for effective monitoring and reporting.

The application of the best available science is a key part of developing environmental standards and monitoring and reporting on their implementation and effectiveness. The ministry continues to focus on a range of strategies to achieve this objective.

Key Strategies

The 2004/05 – 2006/07 Service Plan identified the following strategies for this objective:

1. Acquire the data, information and knowledge to support an approach to conservation that is informed by science.
2. Implement monitoring and reporting programs to track the status for species and habitats and their responses to management actions.
3. Develop standards and an assessment process to support an approach to the protection of fish habitat in urban areas that is informed by science.
4. Work with private- and public-sector partners to develop environmental standards and best practices for the *Forest and Range Practices Act*.

Performance Measure and Results

The percentage of known native species that are threatened or endangered in the province.

Performance Measure	2004/05 Target	2004/05 Actual	2004/05 Variance
The percentage of known native species that are threatened or endangered in the province. Note: species at risk include birds, mammals, reptiles, amphibians, freshwater fish, ferns and orchids.	Improve on the baseline situation (14.2% of known native species identified as being at risk in 2000).	New data will not be available for publication until 2006.	Data not available to enable comparison.

Source: Ministry of Water, Land and Air Protection.

Benchmark/Explanatory Information: British Columbia ranks third among provinces and territories for the number of species ranked nationally as "at risk" or "may be at risk." The Canadian Endangered Species Council considers those species that are "at risk" to be those that have been formally assessed by the Committee on the Status of Endangered Wildlife in Canada (COSEWIC) or by an equivalent provincial or territorial body, while those species that "may be at risk" are endangered or threatened species that lack a formal assessment. (Source: Canadian Endangered Species Conservation Council (CESCC). 2001. *Wild Species 2000: The General Status of Species in Canada*. Ottawa: Minister of Public Works and Government Services Canada.)

Rationale for the Performance Measure

The ministry is using an outcome measure of the percentage of known native species that are threatened or endangered in the province to track its progress in achieving this objective. This measure involves monitoring the status of species in the presence of pressures on habitat and associated management responses by both the public and private sectors. Measures of species at risk are used nationally and internationally to indicate the status of ecological diversity, which is a commonly used indicator of environmental sustainability.

Achievements and Key Issues

The base data are from a federal government report that was published for the first time using 2000 data. The next report is to be published in 2006 using 2005 data. Tremendous progress has been made in recent years to compile information on wild species, but considerable challenges remain to expand, improve and update the information.

The ministry continues to engage actively with its partners — the federal government, local government, First Nations, industry, conservation organizations and communities — in support of species at risk protection and recovery planning. Nearly 50 recovery teams are active in the province, bringing forward the scientific and socio-economic information necessary to guide public and private sector actions on the protection and recovery of over 125 species that have been nationally designated as being at risk in British Columbia.

There remain some key issues that underpin the interpretation and application of this performance measure. Results from different years cannot be readily compared because the number and percentage of species that are threatened or endangered change based on several factors that are unrelated to the rate at which species are actually becoming threatened or endangered. For example, the rate at which the national Committee on the Status of Endangered Wildlife in Canada (COSEWIC) has been adding species to its lists in recent years reflects the rate at which it is able to assess the status of species rather than the rate at which species are becoming at risk.

Future Direction

This measure has not been included in the 2005/06–2007/08 Service Plan because new data will not be available until 2006. However, the ministry will continue to report on its activities and progress regarding species at risk.

Provincial, territorial and federal wildlife agencies are committed to an ongoing and comprehensive process for wild species assessment and monitoring. The Province will increase the number and variety of species it assesses, and will periodically re-assess these species, addressing any data gaps it identifies. The Province will also continue working toward recovering currently listed at-risk species. A challenge is that there is often a time lag between when an action is taken and when its impact is reflected in the data, thus the ministry's recent progress may not be reflected in the data.

Objective 3: Increased number of partnerships to conserve species and their habitats.

Partnerships will be a crucial mechanism in the ministry's shift from being sole protector of the environment to promoting a shared stewardship approach. The following strategies remain key to the ministry's success in sharing the responsibility of environmental stewardship with others.

Key Strategies

The 2004/05–2006/07 Service Plan identified the following strategies for this objective:

1. Establish and maintain relationships with First Nations, communities, environmental organizations and academia to undertake activities to conserve ecosystems, species and habitats.
2. Provide standards, guidelines, best management practices and encouragement to private landowners to develop and implement sustainable stewardship activities.

Performance Measure and Results

Number of collaborative management plans with First Nations.

Performance Measure	2004/05 Target	2004/05 Actual	2004/05 Variance
Number of collaborative management plans with First Nations.	Develop and implement 2 plans.	1 plan developed.	Target partially met.

Source: Ministry of Water, Land and Air Protection.

Benchmark/Explanatory Information: There were 14 collaborative management plans in place with First Nations as of year end 2003/04. Also, as indicated throughout this report, the ministry has several other stewardship partnerships in place to address a variety of issues.

Rationale for the Performance Measure

Given that partnerships are an important mechanism for a shared-stewardship approach to protecting the environment, the ministry has developed a measure to monitor its progress in establishing these important relationships. The ministry is currently focusing on measuring its progress in the specific area of establishing collaborative management plans with First Nations. These are important types of partnerships through which the ministry is providing a significant role to First Nations for making recommendations for protected area management.

Achievements and Key Issues

The ministry developed and negotiated numerous partnership agreements with various First Nations groups during the year. One collaborative management plan for protected area management received formal sign off. The ministry also successfully finalized a stewardship agreement for fish and wildlife with the same First Nations group.

This brings the total number of collaborative management plans in place to 15. Another five collaborative management plans are in draft stage and it is expected that the shortfall in meeting the 2004/05 performance target will be met in 2005/06.

Future Direction

The ministry will be reviewing the current process for the development and implementation of collaborative management plans and establishing new targets for this measure. The ministry has several other stewardship partnerships in place and is working to develop more; thus, it may broaden the scope of this measure in the future. The ministry may also consider evaluating the effectiveness of individual partnerships, as it is difficult to report in aggregate on the extent to which all established partnerships are appropriate or of how effectively they produce the intended results and contribute to desired outcomes.

Goal 3: Provide and enhance park, fish and wildlife recreational services and opportunities for British Columbians and others.

Park, fish and wildlife recreation contribute significantly to the provincial economy. To help ensure that British Columbia's parks continue to showcase the natural beauty of the province and attract visitors, this goal focuses on the provision of high-quality outdoor recreational experiences and services to users of the provincial parks system and on the optimization of the economic contribution of outdoor recreation.

Core Business Area: Environmental Stewardship

Objective 1: High-quality park facilities, services and recreational opportunities.

The ministry continues to focus on providing high-quality client service in provincial parks. Key areas in which the ministry is working to provide high-quality outdoor recreation opportunities are identified below.

Key Strategies

The 2004/05 - 2006/07 Service Plan identified the following strategies for this objective:

1. Implement a new management model for B.C. parks to increase visitation through day use, camping and lodge usage.
2. Initiate further opportunities for delivery of appropriate park recreation services, through partnerships with commercial operators.
3. Monitor park operations to ensure service standards are achieved, facilities are maintained and conservation and habitat-restoration priorities are met.

Performance Measure and Results

Visitor satisfaction with park and campground facilities and services.

Performance Measure	2004/05 Target	2004/05 Actual	2004/05 Variance
Visitor satisfaction with park and campground facilities and services.	Maintain or improve based on a 5-year rolling average.	80%	Target met.

Source: Ministry of Water, Land and Air Protection.

Benchmark/Explanatory Information: The 5-year rolling average target for 2004/05 was approximately 80%, which is based on the average Visitor Satisfaction Index rating for the reporting years of 1999/2000 to 2003/2004. The 5-year rolling average for 2003/04 was approximately 80%, which is based on the average Visitor Satisfaction Index rating for the reporting years of 1998/1999 to 2002/2003.

Rationale for the Performance Measure

Camping is one of the key types of outdoor recreation that the ministry provides, with campground facilities and services provided in provincial parks throughout the province. To directly assess the ministry's effectiveness in achieving client satisfaction, the ministry has conducted an annual satisfaction survey of visitors to campgrounds in the provincial

parks system since 1985. This is an important outcome measure as the survey results enable BC Parks to capture campers' views about the quality of services being provided in campgrounds, and, therefore, to identify priorities for service and facility improvements.

Achievements and Key Issues

The ministry maintained its visitor satisfaction rating based on the five-year rolling average, thus the target was met. The target in the 2004/05 – 2006/07 Service Plan was increased from past years to reflect recent performance. The target had been set at 75% previously.

The Visitor Satisfaction Index is the overall rating, averaged for the province, that campers give in the survey to five categories: cleanliness of restrooms, cleanliness of grounds, condition of facilities, sense of security and control of noise. The rating is based on the percentage of responses that are "excellent" and "above average." The ministry uses the index to determine how well these five particular services are being provided from year to year, and how effective service improvements have been. Figure 4 shows the Visitor Satisfaction Index for the past 10 years.

Figure 4. Visitor satisfaction index from 1995/96 to 2004/05



Future Direction

To improve customer satisfaction and increase the number of visits to provincial parks, the ministry will continue to upgrade campsites, trails, water systems and other facilities. The ministry will also consider innovative ways to address changing demographics and

camper demand for new services. These efforts will ensure that the province's parks provide world-class outdoor recreation opportunities.

Objective 2: High-quality hunting, angling and wildlife viewing opportunities.

The ministry employs a range of strategies to provide high-quality outdoor recreational opportunities related to the province's fish and wildlife resources and works cooperatively with several partners in this area.

Key Strategies

The 2004/05 – 2006/07 Service Plan identified the following strategies for this objective:

1. Work with the Freshwater Fisheries Society of B.C. to cooperatively manage the stocking of fish in lakes and streams, undertake conservation activities and promote freshwater angling.
2. Implement new projects or partnerships to expand, enhance and diversify fish and wildlife recreation.
3. Increase the involvement of First Nations and users in allocating natural resources for hunting, angling and wildlife viewing opportunities.
4. Provide hunting and angling authorizations, based on allowable harvest levels informed by science, to ensure the long-term sustainability of wildlife and fish resources.

Performance Measure and Results

Client satisfaction with fish and wildlife opportunities.

Performance Measure	2004/05 Target	2004/05 Actual	2004/05 Variance
Client satisfaction with fish and wildlife opportunities.	Survey to be developed and administered electronically to hunters and anglers who purchase licences.	Paper-based survey conducted. Hunters: 80% (in 2003/04) Anglers: 89.7% (in 2003/04)	Plan to survey electronically replaced for now with paper-based survey method.

Source: Ministry of Water, Land and Air Protection.

Benchmark/Explanatory Information: The first survey was conducted in 2003/04; hence data are not available for earlier years.

Rationale for the Performance Measure

Hunting, angling and wildlife viewing opportunities are other key types of outdoor recreation that the ministry provides throughout the province. Client satisfaction is an important intended outcome of providing British Columbians and visitors with fish and wildlife recreation opportunities. This performance measure was selected to determine the ministry's effectiveness in achieving this outcome.

Achievements and Key Issues

The ministry is currently acquiring the necessary data for this performance measure through a regular paper-based survey of hunters and anglers administered in the fourth quarter of each reporting year. The survey conducted in 2003/04 indicated that 80% of hunters and 89.7% of anglers were satisfied with their experiences. The results for the 2004/05 survey will not be available until after the publication date of this report.

Future Direction

The ministry plans to implement a comprehensive electronic licensing and permitting application using a phased approach. At such time as electronic licensing is in place, a survey may be developed and administered to hunters and anglers who purchase licences over the internet. An electronic survey method may pose some data challenges, but it is expected to be a more cost-effective means of data collection than the paper-based method used currently.

The ministry will continue to focus its efforts on working with the Freshwater Fisheries Society of B.C. to manage existing and create new fisheries. Currently, the society is responsible for stocking approximately 1,000 lakes and streams throughout the province annually and provides conservation fish culture services that support steelhead and sturgeon recovery programs. The society is also developing programs to inform and educate the public about fish in support of this important recreational and economic activity.

Objective 3: Optimize the economic contribution of park, fish and wildlife recreation.

Economic contribution is an important factor that the ministry considers when determining the level and type of park, fish, and wildlife services and opportunities to provide. The ministry is undertaking initiatives in several areas to achieve this objective, which are identified below.

Key Strategies

The 2004/05 – 2006/07 Service Plan identified the following strategies for this objective:

1. Promote participation in recreational opportunities in conjunction with the provincial resort strategy initiatives.
2. Work with communities on the development of key parks and special tourism destinations.
3. Provide unique hunting and fishing opportunities to enhance regional tourism.
4. Provide appropriate cost recovery and financial return to the province for fish, wildlife and recreation services.
5. Explore electronic service delivery to improve the timeliness of licensing, authorization and permitting processes for fish, wildlife and park recreation.
6. Work with Treaty Negotiations Office and First Nations to explore options for tourism partnerships related to park, fish and wildlife recreation.

7. Develop agreements/partnerships with other governments, the private sector and other stakeholders to improve park and wildlife recreation opportunities.
8. Provide communication and education about recreational opportunities and services to clients, using web-based information sources.

Performance Measure and Results

Number of basic hunting and angling licences sold.

Performance Measure	2004/05 Target	2004/05 Actual	2004/05 Variance
Number of basic hunting and angling licences sold.	Maintain or increase the number of basic hunting and angling licences sold.	Hunting: 84,003 resident 5,931 non-resident Angling: 248,052 resident 68,328 non-resident	Hunting: Target met for resident and non-resident. Angling: Target substantially achieved for resident and non-resident.

Source: Ministry of Water, Land and Air Protection.

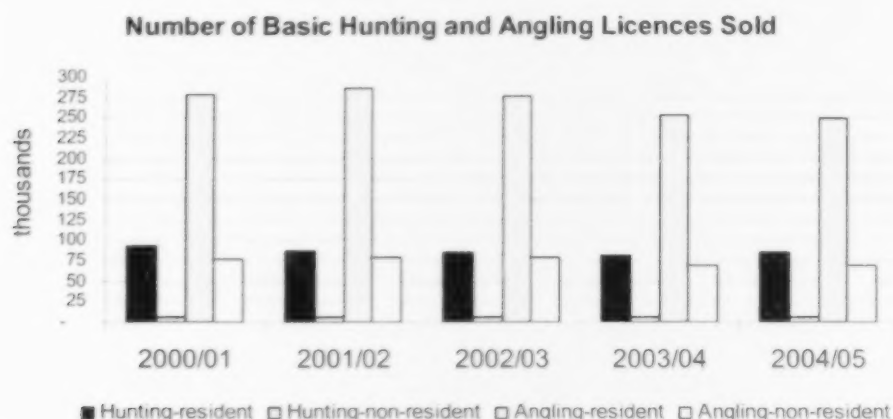
Benchmark/Explanatory Information: There is a global decline in the numbers of hunters and anglers, with the decline more pronounced for hunters. This is considered to be due to a combination of demographics, urbanization and changing preferences. The total numbers of basic hunting and angling licences sold in the 2003/04 fiscal year were as follows: Hunting — 81,368 resident and 5,785 non-resident; Angling — 252,867 resident and 69,398 non-resident.

Rationale for the Performance Measure

Fish and wildlife recreational services and opportunities are important sources of regional tourism throughout the province. The economic contribution from these sources is an important factor that the ministry considers when determining the level and types of fish and wildlife recreational services and opportunities to provide. This performance measure currently reports on the actual number of hunters and anglers benefiting from these opportunities in British Columbia as the trend in this data should provide a reasonable indication of changes in the economic contribution resulting from fish and wildlife opportunities.

Achievements and Key Issues

In 2004/05, the number of resident and non-resident hunting licences sold increased from the previous year (see Figure 5 below). However, the number of angling licences sold to both residents and non-residents declined slightly. There are a number of factors that could have contributed to the number of anglers being slightly lower than in the previous year. These include the weather conditions over the past two summers and the potential threat of forest fires, and previous licence fee increases to which anglers may still be adjusting.

Figure 5. Number of basic hunting and angling licences sold from 2000/01 to 2004/05

Future Direction

Economic contribution can be estimated and reported in various ways. With the demographic characteristics of hunters and anglers changing, and increasing pressures placed on fish and wildlife populations, the focus when allocating fish and wildlife resources for recreation purposes is shifting from increasing the number of participants to providing unique opportunities matched to the preferences of participants. With this shift, changes in the number of basic licences sold may no longer provide a good indication of changes in the economic contribution of fish and wildlife recreation.

In the future, the ministry may consider including different performance measures to report on the contributions of hunting and angling activities to the province's Gross Domestic Product (GDP) and employment. Possible measures are the percentage of the province's GDP contributed by hunting and angling activities, as well as the number of jobs dependent on these activities. The ministry has worked with B.C. Stats to develop an economic model for estimating economic contribution more directly. In 2003, it is estimated that hunting and angling activities contributed more than \$160 million (0.13%) to the province's GDP. These activities also generated employment for approximately 9,770 British Columbians.

Performance Measure and Results

Number of recorded visits to B.C. parks.

Performance Measure	2004/05 Target	2004/05 Actual	2004/05 Variance
Number of recorded visits to B.C. parks.	Increase the number of recorded visits to B.C. parks by 20% by 2010.	Approximately 18.3 million recorded visits	None — target not specified for 2004/05.

Source: Ministry of Water, Land and Air Protection.

Benchmark/Explanatory Information: Since 1998/99, the number of visits to Ontario provincial parks ranged from 8.8 million to 10.5 million annually. In 2003/04, Ontario had approximately 10.2 million visits to their provincial parks. (Source: Ontario Ministry of Natural Resources. 2004. *Ministry of Natural Resources Results Based Plan for 2004–2005.*)

Rationale for the Performance Measure

Recreational services and opportunities provided in provincial parks make an important contribution to local economies throughout British Columbia. This economic contribution is an important factor that the ministry considers when determining the level and types of park recreational services and opportunities to provide. A measure of the economic contribution of parks is being provided though an estimate of the number of park visitors (measured as the number of recorded visits to provincial parks). The trend in this measure should provide a reasonable indication of the trend in the economic contribution.

Achievements and Key Issues

As a result of recent changes to its business model, the manner in which BC Parks collects park visitation data has changed. This change has resulted in inconsistent park visitation figures and figures that do not accurately reflect actual visitation trends across the province. As a result, the ministry has conducted an extensive quality assurance review of all park visitation data from 1999 to 2004. This review has resulted in revised visitation numbers for 1999 to 2004 and has led to a new methodology intended to track annual visitation trends across the province.

As a result of this review, overall attendance figures for 2003 were revised from the 17.4 million previously reported in the 2003/04 Annual Service Plan Report to 19 million. For 2004, the quality assurance process showed total recorded visitation as 18.3 million.

BC Parks has determined that the best way to measure annual trends in visitation is to report figures collected at parks, campsites and day-use areas where there has been no change to the number of collection sites or the duration of the collection season. BC Parks has identified 115 campgrounds and 83 day-use areas where visitation has been consistently recorded since 1999. Using these sites, measured from year to year, BC Parks is able to provide more accurate annual trend data, and estimates that from 2003 to 2004, the decline in visitation was approximately 3%.

A variety of factors can influence park visitation, such as global tourism trends, weather conditions, forest fires, gas prices, new day-use fees, facility conditions, and changing demographics and preferences.

(See Appendix E: Notes on Data Completeness, Reliability and Methodology for more information about the methodology for this measure.)

Future Direction

The ministry's target is to increase recorded visits to provincial parks by 20% by 2010. This is expected to be attained through a general growth in tourism in British Columbia, as well as through improving the camping and day-use experience for park visitors by upgrading park facilities, implementing the government's resort strategy and working with communities on the development of key parks and special tourism destinations. Tourism British Columbia is forecasting growth in visitor volume in 2005 of 2.0% for British Columbia residents and 2.3% overall. (Source: Tourism British Columbia. *2005 Tourism Outlook*. March 2005).

As with the performance measure above — the *number of basic hunting and angling licences sold* — changes in the number of participants will become a less accurate indicator of changes in the economic contribution of park recreation as the types of experiences provided become more varied. Hence, work may be undertaken to more directly estimate the economic contribution of parks to the provincial economy.

Goal 4: Provide effective and efficient planning and support for ministry programs.

This goal reflects the ministry's commitment to provide corporate leadership and services for ministry programs. Goal 4 also reflects the ministry's priorities of support for government initiatives, fiscal responsibility and efficient client service. In 2004, the core business area Compliance Operations was introduced in an effort to more fully support ministry programs.

Core Business Areas: Executive and Support Services Compliance Operations

Objective 1: Clear vision, leadership, direction and support for all ministry programs.

The ministry strives to ensure that its resources are used to address high-priority issues in the most effective and efficient ways. To obtain this objective, the ministry focuses on a range of strategies related to management, planning, deregulation, regulatory reform and compliance.

Key Strategies

The 2004/05 – 2006/07 Service Plan identified the following strategies for this objective:

1. Provide guidance on how the ministry will make decisions about initiatives based on the consideration of all relevant factors, including economic, social and environmental factors.

2. Establish strong strategic policy leadership that focuses on broad directions, continuous improvement and innovation.
3. Undertake strategic planning and provide leadership and support to ensure a coordinated and integrated approach to ministry initiatives in all regions of the province (e.g., delivery through an effective committee structure).
4. Eliminate, revise or develop new legislation as appropriate to facilitate delivery of the ministry's strategic shifts and to address deregulation requirements.
5. Continue to guide and support the integration of science and risk management in ministry decision-making.
6. Participate and provide leadership in intergovernmental forums and associated initiatives to achieve provincial objectives (e.g., Canadian Council of Ministers of the Environment [CCME], Union of British Columbia Municipalities [UBCM]).
7. Participate in interministry forums to accomplish ministry and governmental objectives (e.g., Partnership Committee on Agriculture and the Environment, the Ministry of Transportation Memorandum of Understanding).
8. Support key government initiatives, such as the government's economic and fiscal strategy, B.C. Public Lands Trust, the 2010 Olympic and Paralympic Winter Games, and the acquisition of Burns Bog.
9. Effectively communicate expectations and results to staff, clients and the public.
10. Establish a formalized mechanism for business liaison to address concerns and expedite the resolution of issues.

Performance Measure and Results

Progress toward delivery of a three-year deregulation plan (measured as percentage reduction in ministry's regulatory count).

Performance Measure	2004/05 Target	2004/05 Actual	2004/05 Variance
Progress toward delivery of a three-year deregulation plan (measured as percentage reduction in ministry's regulatory count).	38% cumulative reduction.	42.38% cumulative reduction.	Target exceeded.

Source: Ministry of Water, Land and Air Protection.

Benchmark/Explanatory Information: The ministry reduced its regulatory count by cumulative totals of 23.87% as of March 31, 2003, and 25.1% as of March 31, 2004.

Rationale for the Performance Measure

As part of its *New Era* commitments, the government pledged to reduce regulations by 33% overall by June 4, 2004. This was the initial step in reducing the economic burden of prescriptive regulations for industry and other stakeholders. To support this initiative,

the ministry had a three-year plan to reduce regulations by 38%. This measure monitors ministry progress in delivering on its deregulation plan.

Achievements and Key Issues

The ministry exceeded its target for the deregulation plan by reducing regulations by 42.38% by June 4, 2004.

The original deregulation program ended in June 2004. The government has entered a second phase of regulatory reform (June 2004 to June 2007), which requires all ministries to achieve no net increase in their baseline regulatory count, which is measured as of June 4, 2004.

Future Direction

In the 2005/06 – 2007/08 Service Plan, this performance measure and the related targets were revised to reflect the next phase of regulatory reform. The new measure is *progress toward delivery of a three-year regulatory reform plan*, with performance targets of a zero per cent net increase in the regulatory count in each of the next three years.

The ministry will continue to be judicious about maintaining appropriate regulations and using non-regulatory approaches and best management practices.

Performance Measure and Results

Progress in implementing risk management processes throughout the ministry.

Performance Measure	2004/05 Target	2004/05 Actual	2004/05 Variance
Progress in implementing risk management processes throughout the ministry.	Maintain or improve on ranking.	Baseline data were established. Ranking is "in process."	No comparable data available as base data were only identified in 2004/05.

Source: Ministry of Water, Land and Air Protection.

Benchmark/Explanatory Information: This performance measure was introduced in the ministry's 2004/05 – 2006/07 Service Plan, which indicated that base data would be identified by March 31, 2004.

Rationale for the Performance Measure

The ministry has been doing risk management for many years (e.g., assessing risks to habitat and park facilities, as well as assessing risks related to contaminated sites). The ministry's Service Plans have included strategies to further integrate risk management into ministry business processes. This is now a government-wide requirement. The ministry introduced this performance measure in the 2004/05 – 2006/07 Service Plan as a pilot measure to assess its progress in implementing risk management processes based on the ministry's risk maturity matrix.

Achievements and Key Issues

The ministry is an active proponent of risk management and has considerable experience in examining risks related to human health, the environment, public and private property, Crown Assets and its own business operations. Examples of these include risks associated with revenue, habitat, park facilities and contaminated sites. During 2004/05, the ministry managed a number of risks linked to the achievement of its Service Plan goals and its capacity to deliver its mandate. Some of these are summarized in Appendix D: Risk Identification and Ministry Response.

To assess its progress regarding this performance measure, the ministry is piloting an organizational risk maturity matrix that is based on approaches used by the Risk Management Branch of the Ministry of Finance and the Office of the Auditor General of British Columbia.³ The ministry's progress in implementing risk management practices is being assessed for a few areas (leadership; culture and training; integration with planning, budgets, and business processes; and monitoring and reporting).

Using the assessment ratings of the Office of the Auditor General, a preliminary review of the ministry's risk management practices indicates that, on average, the ministry's risk maturity rating is "in process." The degree to which risk management processes have been implemented varies between program areas in the ministry, with some areas having had key aspects of risk management practices incorporated into their business practices for many years, and other areas having recently implemented these practices.

Future Direction

This measure is not included in the 2005/06–2007/08 Service Plan. The ministry is attempting to reduce its performance measures to focus on a smaller number of key outcome measures. Risk management will continue to be done as a normal part of the ministry's business operations.

Objective 2: Efficient program management, fiscal responsibility and client service.

Managing programs efficiently, meeting fiscal targets and promoting client satisfaction enable the ministry to have resources available for more initiatives and to make greater progress in delivering its mandate. To achieve this objective, the ministry is working simultaneously in a number of areas as reflected in the strategies below.

Key Strategies

1. Implement a comprehensive performance management framework, including effective monitoring, reporting and performance measurement.

³ The organizational risk maturity matrix is modeled on the assessment matrix used by the Office of the Auditor General of British Columbia (OAG) in *Building Better Reports: Our Review of the 2002/03 Annual Service Plan Reports of Government* at <http://bcauditor.com/AuditorGeneral.htm>. The matrix provides an assessment in terms of four stages of development: start-up, in process, fundamentals in place, and fully incorporated.

2. Implement a human resources strategy that acknowledges changing workforce requirements, fosters healthy and knowledgeable staff, and supports achievement of business objectives.
3. Ensure service requirements and fiscal targets are aligned.
4. Work with ministries and others to develop effective agreements and memorandums of understanding to share expertise, services and service facilities across the regions.
5. Identify methods to reduce the costs incurred by those who must meet environmental standards, reduce conflicts and litigation, and eliminate service backlogs.
6. Implement an effective information system strategy.
7. Coordinate environmental assessment referrals for the ministry.

Performance Measure and Results

Percentage of staff with an Employee Performance and Development Plan.

Performance Measure	2004/05 Target	2004/05 Actual	2004/05 Variance
Percentage of staff with an Employee Performance and Development Plan.	100 %	99 %	Target substantially achieved.

Source: Ministry of Water, Land and Air Protection.

Benchmark Information: In 2002/03, an estimated 35% of all management staff and roughly 20% of all ministry staff had an EPDP. In 2003/04, 100% of ministry staff had an EPDP that linked their work and development goals to the 2003/04 – 2005/06 Service Plan. (Source: Ministry of Water, Land and Air Protection, Strategic Human Resources Branch.)

Rationale for the Performance Measure

Achieving this objective requires ministry staff to focus on developing key performance and development goals that will enable them to contribute to accomplishing ministry objectives articulated in the Service Plan. A key initiative for ensuring that this occurs is a ministry requirement for all staff to have an Employee Performance and Development Plan (EPDP). This plan identifies what work an employee is accountable for and makes clear links to the ministry's Service Plan. As the EPDP initiative is being implemented, the ministry is using an output measure to indicate the percentage of staff with an EPDP.

Achievements and Key Issues

The ministry substantially achieved its target. In 2004/05, 99% of eligible ministry staff had an EPDP that linked their work and development goals to the 2004/05 – 2006/07 Service Plan. The 1% of staff who did not have an EPDP were in transition with their work assignments and will have EPDPs in 2005/06. The EPDP is proving a valuable tool to assist staff in understanding how their efforts link to the ministry's objectives and broader goals of the government.

Future Direction

The Employee Performance and Development Plan identifies the work to be undertaken by an employee as well as plans for the employee's development related to his or her job and career development. To follow-up on the EPDPs, the ministry is also committed to having all staff have a review of their EPDPs conducted at the end of the year. The ministry is considering that eventually it will move to an outcome measure that shows the extent to which work performed and staff development are consistent with the EPDPs.

Performance Measure and Results

Survey of ministry employees to measure workplace wellness.

Performance Measure	2004/05 Target	2004/05 Actual	2004/05 Variance
Survey of ministry employees to measure workplace wellness.	Survey targets and frequency will be reviewed following the completion of the baseline survey.	No further surveys are planned because other government agencies are conducting surveys that will provide data for the ministry.	Target met.

Source: Ministry of Water, Land and Air Protection.

Benchmark/Explanatory Information: The ministry conducted a broad staff survey measuring workplace wellness in 2003/04. The results were reported in the ministry's 2003/04 Annual Service Plan Report, which is available at <http://www.bcbudget.gov.bc.ca/annualreports/wlap> *.

Rationale for the Performance Measure

In 2003/04, the ministry conducted a wide-ranging staff survey to measure workplace wellness. The survey was timed to take the pulse of the ministry following restructuring, implementation of budget targets and workforce adjustment. It was to provide benchmark data enabling comparisons of results with other public- and private-sector organizations, and to identify key areas for improvement and allow for monitoring changes over time. This performance measure would allow for ongoing monitoring and assessment of workplace wellness and of the impact of the ministry's human resource strategy.

Achievements and Key Issues

The ministry did not complete a survey of its employees to measure workplace wellness in 2004/05 and has no plans to conduct further surveys in this area because similar surveys are being conducted by other government agencies. The Office of the Auditor General conducted a work environment survey in November 2003, which collected information relevant for each ministry. The ministry wanted to review the findings of this survey before launching another survey of a similar nature. The report, *Building a Strong Public Service: Reassessing the Quality of the Work Environment in the British Columbia Public Service*, was released in February 2005 and is available at <http://bcauditor.com/AuditorGeneral.htm> *. The Public

* Refer to note on page 3.

Service Agency plans to conduct regular work environment surveys and hence the ministry will not duplicate those efforts.

Numerous initiatives are underway within the ministry to support employee wellness. Examples include:

- The development of the ministry's revised human resource management strategy — its *People Strategy*. Objectives of this strategy include improving communication on the status of human resource related initiatives, supporting work/life balance for all employees, and promoting a culture of learning and development.
- The ministry is supportive of a flexible work environment and promotes work/life balance, recognizing that this is unique to each individual.
- Numerous division-level initiatives are underway within the ministry to support workplace wellness.

Future Direction

This measure is not included in the 2005/06–2007/08 Service Plan as the ministry does not plan to conduct further surveys in this area. The Public Service Agency will be responsible for administering annual Work Environment Surveys, with the next being anticipated in the fall of 2005.

Deregulation

As part of its *New Era* commitments, the government pledged to reduce regulations by 33% overall by June 4, 2004. The ministry's three-year plan was to reduce regulations by 38%, and this commitment was met with an overall reduction of 42.38%. (See the performance measure for deregulation under Goal 4, Objective 1.) The ministry has undertaken significant deregulation and regulatory reform initiatives that aim to ensure British Columbia's regulatory climate enables economic development and recreational activities while maintaining environmental standards.

Regulatory reform has been and will continue to be undertaken under each core business area as the ministry pursues its shift from prescriptive to results-based approaches to regulation. For example, the bringing into effect of new legislation (e.g., the *Integrated Pest Management Act*; the *Environmental Management Act*) and the amendment of existing statutes (e.g., the *Water, Land and Air Protection Statutes Amendment Act*; the *Parks and Protected Areas Statutes Amendment Act*) are intended to reduce regulatory burden, clarify responsibilities and make more efficient use of ministry resources.

Another three-year plan for regulatory reform has been introduced by the government. Over the next three years, the ministry will continue its review of legislation and regulations (e.g., the *Wildlife Act*) and measure its progress in delivering this plan using the new targets set in the government's regulatory reform plan.

Report on Resources

Introduction

The ministry is committed to supporting the government's plan to balance the budget and achieve its fiscal targets outlined in the 2004/05 – 2006/07 Service Plan. The information below provides an overview of ministry funding and expenditures during 2004/05.

There has been a change this year in the way variance figures are calculated and displayed, so as to be consistent with the changes introduced in the Public Accounts. (See footnote 3 under the Resource Summary table.)

Ministry Funding

The total net funding available for ministry operations was \$160.61 million. This funding was derived from the following sources:

- Voted appropriation. This is the largest source of ministry funding, which provided \$112.44 million.
- Statutory appropriation. The Sustainable Environment Fund authorizes the collection of waste permit fees under the *Environmental Management Act* and revenue collection under the *Social Services Tax Act* (e.g., taxes collected for products such as children's disposable diapers, which are used for environmental protection programs). This funding source provided \$35.70 million.
- Other authorizations. Contingency access provided \$4.67 million and Supplementary Estimates provided \$7.80 million.

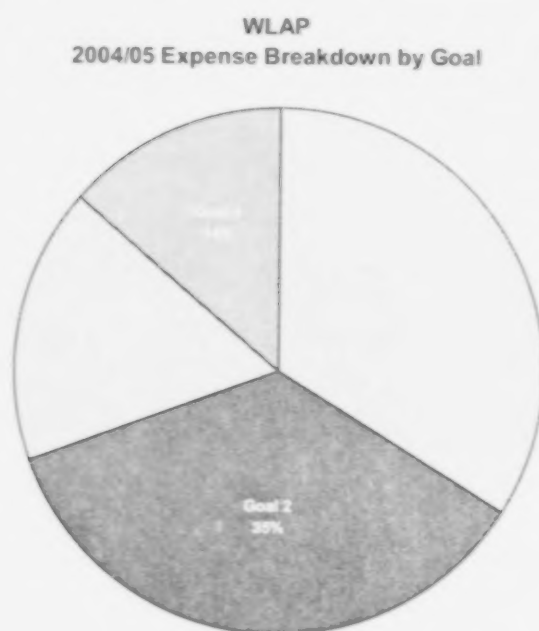
Other funding sources available to the ministry for operational expenses not summarized above include:

- Internal recoveries. Recoveries within the government reporting entity excluding the Sustainable Environment Fund, which are estimated at \$0.40 million. Actual internal recoveries for the year were \$2.26 million.
- External recoveries. Recoveries from outside the government reporting entity, which are estimated at \$6.17 million. Actual external recoveries were \$6.75 million.

Ministry Expense Breakdown by Goal

Resources, strategies and results are linked in the Ministry Service Plan. Figure 6 demonstrates the percentage breakdown of the ministry's budget by goal and how goals are aligned with core business areas.

Figure 6. 2004/05 Ministry expense breakdown by goal



Goal 1: Protect the environment and human health and safety by ensuring clean and safe water, land and air.

Core business area — Environmental Protection: 34% (\$54.24 million). Included under this goal is the Sustainable Environment Fund special account.

Goal 2: Maintain and restore the ecological diversity of fish and wildlife species and their habitats. **Core business area —** Environmental Stewardship: 35% (\$57.38 million).

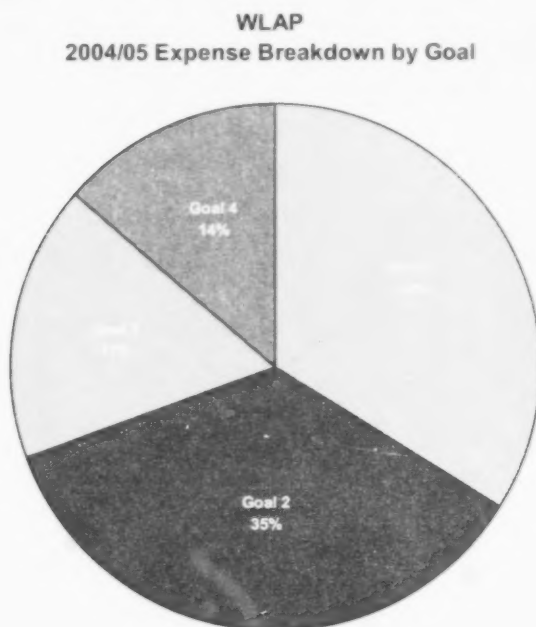
Goal 3: Provide and enhance park, fish and wildlife recreational services and opportunities for British Columbians and others. **Core business area —** Environmental Stewardship: 17% (\$27.12 million).

Goal 4: Provide effective and efficient planning and support for ministry programs. **Core business area —** Executive and Support Services: 14% (\$21.87 million).

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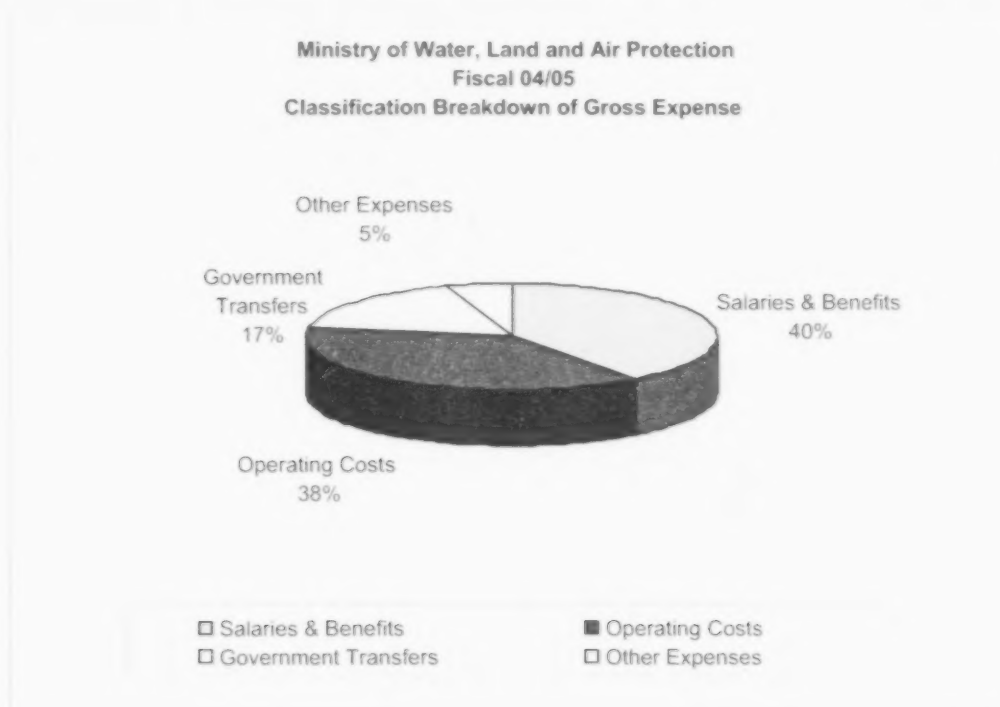
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Goal 4: Provide effective and efficient planning and support for ministry programs. **Core business area** — Executive and Support Services: 14 % (\$21.87 million).

Ministry Expense

The largest expense for the ministry is salary and benefits (\$67.43 million), which accounts for 40% of annual spending (see Figure 7). Operating costs (\$64.52 million), which include professional services contracts, park operating contracts, payments to the B.C. Fresh Water Fisheries Society accounted for 38% of gross expenditures. Transfer payments (\$28.78 million) total 17% and other expenses (\$8.90 million) total 5%.

Figure 7. Gross expense for fiscal 2004/05 (Source: Public Accounts 2004 – 2005)



Comparison of 2004/05 and 2003/04 Expense

Figure 8 shows that the gross expense in 2004/05 increased by \$9.90 million from 2003/04.

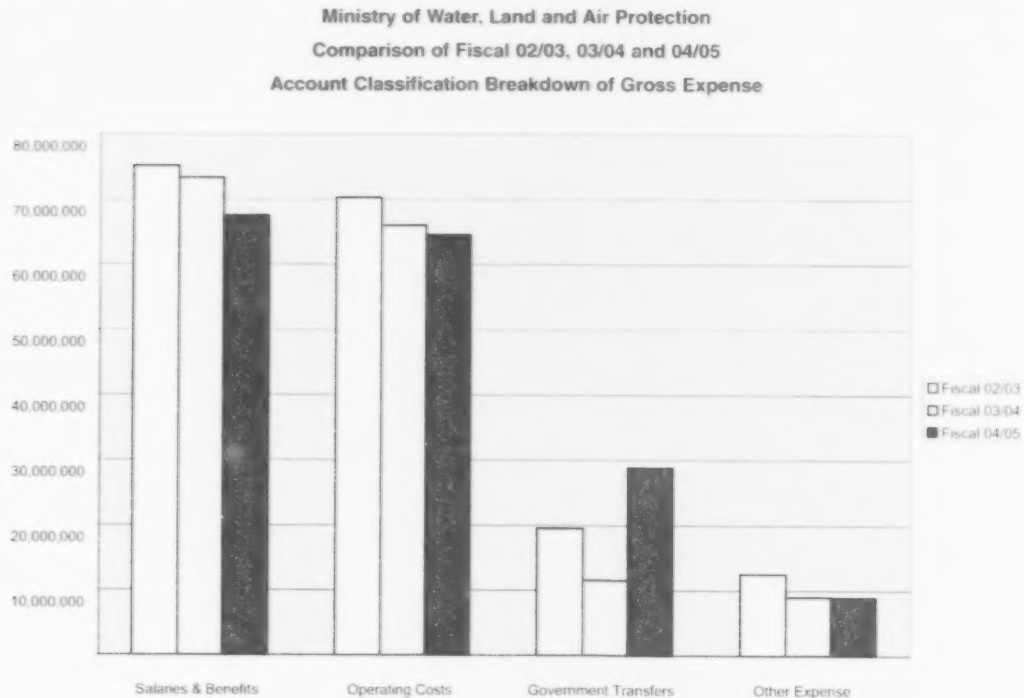
Decreases included:

- Salaries and benefits decreased by \$5.83 million due to work force adjustment.
- Operating costs, which include building occupancy costs, materials and supplies, decreased by \$1.46 million.

Increases included:

- Government transfers increased by \$17.28 million, which included supplementary estimates approved in February 2004 of \$7.80 million for one-time transfer payments to the B.C. Habitat Conservation Trust Fund (\$6.50 million) and post-secondary institutions (\$1.30 million) for conservation research grants. In addition a one-time transfer payment of \$5 million went to the Living Rivers Foundation.
- Investment in training increased from \$447/FTE in 2003/04 to \$567/FTE in 2004/05.

Figure 8. *Three-year comparison of gross expense (Source: Public Accounts 2004 – 2005)*



2004/05 Resource Summary

	Estimated ¹	Other Authorizations ²	Total Estimated	Actual	Variance (Actual minus Total Estimated) ³
Operating Expenses (\$000)					
Environmental Protection	51,375	1,370	52,745	54,243	1,498
Environmental Stewardship	45,080	10,927	56,007	57,377	1,370
Park, Fish and Wildlife Recreation	25,523	172	25,695	27,116	1,421
Executive and Support Services ⁴	26,163		26,163	21,874	(4,289)
Total	148,141	12,469	160,610	160,610	0
Full-time Equivalents (Direct FTEs)					
Environmental Protection	334		334	342	8
Environmental Stewardship	323		323	337	14
Park, Fish and Wildlife Recreation	151		151	162	11
Executive and Support Services	116		116	106	(10)
Total	924		924	947	23
Ministry Capital Expenditures (Consolidated Revenue Fund) (\$000)⁵					
Environmental Protection	222		222	598	376
Environmental Stewardship	7,206	1,389	8,595	16,952	8,357
Park, Fish and Wildlife Recreation	11,215		11,215	4,282	(6,933)
Executive and Support Services	2,500		2,500	700	(1,800)
Total	21,143	1,389	22,532	22,532	0

¹ The "Estimated" amount corresponds to the *Estimates* as presented to the Legislative Assembly on February 17, 2004.

² "Other Authorizations," Operating Expenses, include Supplementary Estimates and Contingencies. "Other Authorizations," Capital Expenditures, include Contingencies.

³ Variance display convention has been changed this year to be consistent with the change introduced in the Public Accounts. Variance is in all cases "Actual" minus "Total Estimates." If the actual is greater, then the variance will be displayed as a positive number.

⁴ Executive and Support Services include expenses for the Minister's Office, Deputy Minister's Office, Strategic Policy Division, Corporate Services Division (shared with the Ministry of Sustainable Resource Management), and shared administrative staff in the regional offices.

A core business area called Compliance Operations has been established for the 2005/06 fiscal year. In 2004/05, resources for Compliance Operations (approximately \$13 million) was reported equally (50%/50%) between Environmental Protection and Environmental Stewardship.

Savings in Executive and Support Services were redirected toward supporting priorities in other core business areas within the ministry.

⁵ Capital Expenditures in fiscal 2005 included \$16 million on lands and tenure compensation acquired for Parks and Protected Areas and \$4 million on park facilities in recreation areas.

Appendix A: Glossary

airshed: Geographical area in which air quality is a function of the same sources, weather and topography.

ambient air or water quality: The overall or general condition of air or water in a region outside the zone of influence of discharges — in contrast to local condition, which may be related to a specific source of contamination.

contaminated site: As defined in the *Environmental Management Act*, means an area of the land in which the soil or any groundwater lying beneath it, or the water or the underlying sediment, contains a hazardous waste, or another prescribed substance in quantities or concentrations exceeding prescribed risk-based or numerical criteria or standards or conditions.

ecosystem: Organisms of a natural community, together with their physical, chemical and biological environment.

greenhouse gases: The gases that play a part in the greenhouse effect: carbon dioxide (CO₂, the most significant greenhouse gas), methane, nitrous oxide, ozone, water vapour, CFCs and other trace gases.

nitrate: An essential plant nutrient found in fertilizers and which may be produced during the breakdown of organic wastes. Excessive fertilizer application, improper agricultural waste management or underground septic tanks may increase nitrate levels in groundwater. Nitrates reduce the ability of blood to carry oxygen. Infants under six months are particularly at risk from drinking well-water containing excessive nitrates.

particulate matter (PM): Fine liquid or solid particles (such as dust, smoke, mist fumes or smog) found in the air or emissions. Also known as particulates.

PM_{2.5}: Measure of particulate matter under 2.5 microns. Recent studies have shown that particles of 2.5 microns or less (PM_{2.5}) pose the greatest health risk. A particle of 2.5 microns is about 1/20th the width of a human hair.

Protected Areas: Refers to parks, recreation areas, ecological reserves and designations under the *Environment and Land Use Act* managed by the Ministry of Water, Land and Air Protection. They include:

- Class A parks established under the *Park Act* or by the *Protected Areas of British Columbia Act*
- Class B and C parks and recreation areas established under the *Park Act*
- Ecological reserves established under the *Ecological Reserve Act* or by the *Protected Areas of British Columbia Act*

- “protected areas” and other conservation-oriented designations established under the *Environment and Land Use Act* that are managed by the Environmental Stewardship Division, Ministry of Water, Land and Air Protection

species at risk: Species at risk means endangered, extirpated or threatened.

stewardship: Stewardship, as in “environmental stewardship,” refers to the concept of responsibly managing natural resources for the benefit of present and future generations and encouraging the active participation of persons or groups, including citizens, communities, government and industry.

sustainable development: Economic and social development within the limits required to sustain long-term environmental well-being. Such development ensures that our use of the environment and natural resources today does not harm the prospects for their use in the future.

Ungulate Winter Ranges (UWRs): Mapped areas of Crown land containing habitat that is necessary for the winter survival of specified ungulate species. General wildlife measures outline the practices that must be followed in UWRs to maintain the values for wintering ungulates.

watershed: An entire area that is drained by a waterway or that drains into a lake or reservoir. Also referred to as a water basin.

Wildlife Habitat Areas (WHAs): Mapped areas of Crown land containing critical habitat, such as breeding, feeding and denning habitat, crucial to identified wildlife. WHAs help protect species and plant communities at risk by specifying mandatory practices called general wildlife measures.

Appendix B: Progress on *New Era* Commitments and Key Projects

The ministry has made considerable progress in achieving the key government commitments contained in the *New Era* document. The ministry has also made progress toward completing other key projects as directed to the Minister. Many initiatives have been completely addressed, whereas others are multi-year in scope. The status of each commitment and project is indicated below, and for the sake of completeness a comprehensive list of initiatives is provided.

Commitments	Key Projects
Prohibit logging or mining in provincial parks	• The government has publicly re-confirmed this legislation and policy.
Lift grizzly bear moratorium	• The Minister of Water, Land and Air Protection lifted the blanket moratorium on July 16, 2001, and replaced it with regional moratoriums where specific conservation concerns were identified. • An independent Grizzly Bear Scientific Panel (charged with reviewing methods and issues considered significant to grizzly bear conservation in British Columbia) submitted its report in March 2003. The report confirmed that the ministry's management of grizzly bears is effective and that sound population estimates are being used.
Ensure decisions on new parks are made in public	• Approval for parks (such as a new Gulf Islands national park and new provincial park at Wakes Cove on Valdes Island) was granted by open cabinet. • Amendments have been made to a number of Acts to enable the transfer of land to the federal government and allow the establishment of the Gulf Islands National Park Reserve.
Acquire and protect Burns Bog	• The Province of British Columbia, together with the Government of Canada, the GVRD and the Corporation of Delta, purchased Burns Bog for \$73 million for approximately 2023 hectares (5,000 acres). The purchase means that an area five times the size of Stanley Park will be preserved.
Implement an improvement plan for threatened airsheds	• The ministry is developing the science and a framework for working with communities to improve air quality. Many regions have developed or are in the process of developing plans that focus on strategic partnerships and actions to improve air quality.

Commitments	Key Projects
Oppose Sumas II power project	• The ministry is supporting the government's actions to represent British Columbia's interests at National Energy Board (NEB) hearings and file an appeal with the U.S. Environmental Protection Agency. In March 2004, the NEB denied an application to construct a power line through Abbotsford.
Maintain ban on bulk water exports	• The government maintains its commitment to the legislation establishing the ban.
Introduce comprehensive groundwater legislation to improve the quality of drinking water	• The government passed amendments to the <i>Drinking Water Protection Act</i> to strengthen accountability for the management and delivery of drinking water. • Phase 1 of the Ground Water Protection Regulation was approved by the government under the <i>Water Act</i>. Additional resources have been approved for implementation of drinking water and water source protection, and coordination among government ministries involved in the protection of water quality has been strengthened.
Review the contaminated sites legislation	• The ministry received and has acted on the report of the Advisory Panel on Contaminated Sites. • The recommendations of the panel were used to develop a new legislative, regulatory and policy framework for contaminated sites in the province, culminating in the enactment of the <i>Environmental Management Act</i> (Phase 1, 2003/04). In 2004, the Act replaced the <i>Waste Management Act</i>. At the same time, the Waste Discharge Regulation, the Conservation Officer Regulation and amendments to the Contaminated Sites Regulation and Hazardous Wastes Regulation came into effect to provide a more efficient, fair and accountable approach to contaminated sites.
Use science-based standards to protect the environment	• The <i>Environmental Trends in British Columbia 2002</i> report was released, which summarizes scientific research on a set of environmental indicators.
Consider the appointment of a Chief Scientist who will advise government from time to time	• The ministry has established an internal committee to provide advice on the acquisition and use of science to inform decisions. • The ministry has established panels of scientific experts to provide advice on specific issues (e.g., the Grizzly Bear Scientific Panel).

Commitments

Enact new or revise legislation to deliver on *New Era* directions

Promote shared stewardship for the delivery of recreational services

Key Projects

- The ministry worked with partners to update provincial regulations protecting urban streams culminating the establishment of the Riparian Areas Regulation.
- The government has harmonized its vehicle and diesel regulations with those regulations under the *Canadian Environmental Protection Act* that meet U.S. Environmental Protection Agency standards.
- The government has passed the Aquaculture Waste Control Regulation to limit waste accumulation on the ocean floor.
- The ministry is reviewing the *Wildlife Act* in order to update legislation in 2006/07.
- The government introduced the Organic Matter Recycling Regulation, which made British Columbia the first jurisdiction in North America to limit the use of recycled organic material in drinking-water watersheds.
- In May 2002, amendments to the *Environment Management Act* were introduced to streamline the ministry's process for entering into partnership agreements with government and non-government organizations. The amendments contributed to a mutual assistance agreement between the ministry's Conservation Officer Service and the Department of Fisheries and Oceans, Conservation and Protection service, and the Intergovernmental Mutual Aid Agreement for Problem Wildlife Incidents signed between the ministry and Parks Canada in July 2002.
- The Recreation Stewardship Panel delivered its recommendations for a new model to support fish, wildlife and park recreation. Implementation of the panel's recommendations began in spring 2003 and will be completed by 2005/06.
- Preparation to transfer provincial freshwater fish hatcheries to the Freshwater Fisheries Society of B.C., a non-profit society, was completed in March 2003. The ministry continues to partner with the society to manage existing and create new fisheries.

Commitments

Develop a Biodiversity Strategy

Develop a Living Rivers Strategy

Deliver a results-based Forest Practices Code

Create a trust for private land donations

Key Projects

- The ministry has made significant progress during the last two years in developing its strategy to protect ecological diversity and manage and conserve species and habitats. Some important advances include the incorporation of identified wildlife sections into the *Forest and Range Practices Act* and amendments to the *Wildlife Act* in the spring of 2004, which enhance the government's ability to designate and protect species at risk in British Columbia.
- In 2004/05, the ministry has partnered with the conservation sector to establish the B.C. Trust for Public Lands in support of biodiversity conservation.
- Over the next five years, the government will direct new funding of \$5 million toward the Living Rivers initiative. The initiative will encompass enhancement, research and restoration projects as well as strengthen partnerships and public awareness of the importance of rivers and watersheds.
- The ministry has worked with the Ministry of Forests and the Ministry of Sustainable Resource Management on the *Forest and Range Practices Act* and regulations. The ministry will continue to work with its private- and public-sector partners to develop environmental standards and best practices.
- In October 2004, the provincial government created the B.C. Trust for Public Lands. The provincial contribution of \$8 million, with a minimum requirement for matching dollars from the conservation sector, will support improved conservation planning, and more efficient acquisition and management of private lands that have unique ecological values.

Commitments

Encourage a strong private-sector economy that maintains high environmental standards

Key Projects

- The ministry is exploring ways to expand investment in species protection and recovery by 2006/07.
- A new AOX Regulation was enacted in July 2002 to appropriately limit discharges of adsorbable organic halides (AOX). A new comprehensive pulp mill standard will be part of revisions to the *Environmental Management Act* (Phase III, 2005/06).
- The ministry's review of waste management legislation has resulted in additional changes to the *Environmental Management Act* (Phase II, 2004/05; Phase III, 2005/06). In 2004, the Waste Discharge Regulation, the Conservation Officer Regulation and amendments to the Contaminated Sites Regulation and Hazardous Wastes Regulation came into effect.
- The *Integrated Pest Management Act* was brought into force along with the Integrated Pest Management Regulation in 2004. The Act and its regulation are aimed at eliminating the need for authorizing routine pesticide applications and enable a two-week turnaround on pesticide application certification, thus lowering costs for government and small business.
- The ministry completed a review of the product stewardship program to extend industry-led product stewardship (e.g., used oil recycling). In 2004, Cabinet approved the Recycling Regulation, which creates a single, performance-based regulatory structure for all ministry product stewardship programs. As well, an additional 125 collection sites for used oil recycling will be opened across the province. The addition of these sites brings the total number of return collection facilities to 500.
- The ministry is exploring options to encourage First Nations partnerships to realize the economic benefits of tourism related to park, fish and wildlife recreation (e.g., the new collaborative management agreement with the Heiltsuk First Nation and the Hakai Luxvbalis Conservancy Area on the Central Coast).
- The ministry will support the 2010 Olympic and Paralympic Winter Games by identifying opportunities for appropriate economic development in recreational areas (e.g., enhanced parks) and participating in the resolution of land use issues.

Appendix C: Legislation Administered by the Ministry

The following legislation, in alphabetical order, is currently administered by the Ministry of Water, Land and Air Protection:⁴

Commercial River Rafting Safety Act, R.S.B.C. 1996, c. 56 [Only some sections relating to safety inspections and enforcement remain in force.]

Creston Valley Wildlife Act, R.S.B.C. 1996, c. 84

Dike Maintenance Act, R.S.B.C. 1996, c. 95

Drainage, Ditch and Dike Act, R.S.B.C. 1996, c. 102

Ecological Reserve Act, R.S.B.C. 1996, c. 103

Environmental Management Act, S.B.C. 2003, c.53

Fish Protection Act, S.B.C. 1997, c. 21 [Section 12 only]

Hunting and Fishing Heritage Act, The, S.B.C. 2002, c. 79

Industrial Operation Compensation Act, R.S.B.C. 1996, c. 222

Integrated Pest Management Act, S.B.C. 2003, c. 58

Land Title Act, R.S.B.C. 1996, c. 250 [Section 219 only, insofar as it relates to the portfolio of the Minister]

Ministry of Environment Act, R.S.B.C. 1996, c. 299 [All except s. 4 (2) d)]

Ministry of Lands, Parks and Housing Act, R.S.B.C. 1996, c. 307 [Sections 3 (3), 5 (b), 6 and 9]

Park Act, R.S.B.C. 1996, c. 344

Protected Areas of British Columbia Act, S.B.C. 2000, c. 17

Skagit Environmental Enhancement Act, R.S.B.C. 1996, c. 426

Sustainable Environment Fund Act, R.S.B.C. 1996, c. 445

Water Act, R.S.B.C. 1996, c. 483 [Respecting ground water matters only; otherwise administered by the Ministry of Sustainable Resource Management]

Water Protection Act, R.S.B.C. 1996, c. 484

Wildlife Act, R.S.B.C. 1996, c. 488

⁴ Citations for all acts and regulations are to the most recent or original versions. Readers are strongly advised to confirm the currency of legislation with appropriate legal research before relying upon these citations as they are frequently amended and are subject to change without notice.

Appendix D: Risk Identification and Ministry Response

Situation	Potential Risk	Risk Management Action
Risks that originate outside the organization.	Negative perceptions about environmental practices in British Columbia may adversely affect international markets.	Continue to use outcome reporting (e.g., environmental trends reports) to provide current and scientifically credible information to media, educators and policy-makers to foster awareness of environmental issues in decision-making.
	Revenue from fees (e.g., from recreation activities) may be affected by: • changing demographics • natural disasters • negative consumer response • international tourism trends	Continue to conduct environmental scans and monitor changes in demographics that may affect revenue generation. Continue to work with Treasury Board staff to improve revenue-reporting models and develop contingencies to mitigate revenue fluctuations.
Risks that relate to the sustainability of the environment.	Rapid expansion of human activities continues to alter habitat and increases the number of species at risk.	Continue to develop strategies and partnerships (e.g., the Freshwater Fisheries Society of B.C.) that encourage stewardship and improve science to inform decisions and the identification, protection and recovery of species and habitat.
Risks that relate to the effectiveness and efficiency of processes and operations.	The optimal indicators of environmental health may not have been identified, which may have a particular result attributed to a certain action when the outcome may be produced by another action or variable. Expansion of the use of partners and shared stewardship may impact the ability to manage project delivery and meet objectives.	Periodically review outcome measures, results and measures in other jurisdictions to determine the best environmental indicators for future reporting. Ensure that the three-year audit and program review plan are used to monitor the outcomes intended from implementing improved approaches (e.g., the park-operating contract process).

Situation	Potential Risk	Risk Management Action
Risks that relate to tangible assets such as land, buildings and equipment.	The possible loss of asset value (e.g., reduced level of maintenance, obsolescence), which would result in decreased revenue potential or return on Crown assets or greater long-term replacement costs.	Use the annual capital plan and asset management strategy with the condition assessment inventory to look at situations that could pose risks to human health or result in serious environmental damage and prioritize capital expenditures for upgrading facilities.
Risks that relate to the use of information (e.g., how it is protected, stored and shared).	Lack of robust information technology will affect the ministry's ability to support effective monitoring and reporting systems or to benefit from business process improvements.	Use the multi-year Information Resource Management Plan to ensure information systems and information management needs are identified and data standards are met. Continue to work with the Ministry of Sustainable Resource Management and other service providers on database integration using improved information systems platforms.
Risks that relate to the organizational culture, human resource activities and fiscal allocation activities.	An aging workforce may mean increased retirement rates, knowledge retention issues and the need to recruit people for key positions. Existing staff may need to supplement skill sets to effectively respond to changing operational requirements.	Monitor progress in implementing succession management for key ministry positions that have been identified. Ensure that all staff have an Employee Performance and Development Plan in place.
Risks that originate from the need to regulate or comply with policies, practices or statutes.	Policies, programs and actions to address environmental impacts may not be appropriate or adequate, which could result in unintended consequences.	Continue to explore opportunities to incorporate reporting information (e.g., environmental trends reports) into priority setting, policy development and performance measurement.

Appendix E: Notes on Data Completeness, Reliability and Methodology

Performance measurement is undertaken to assess and communicate progress toward organizational goals and is contingent on the availability of useful data that are representative of performance. Because data can be imperfect, there is a need to balance the desire for meaningful information against the cost of a "perfect" measure. In the use of its performance measures, the ministry strives to provide accurate and timely information, but at a reasonable cost. In an attempt to improve the consistency and quality of its performance reporting, the ministry has made efforts to follow the *Performance Reporting Principles for the British Columbia Public Sector* (B.C. Office of the Auditor General, 2003).

The following provides a general overview on the performance data, reliability and methodology for the information in the annual report.

Reduction in backlog of applications for medium- and low-risk contaminated sites

The backlog consists of applications that would currently qualify as low to moderate risk, but did not qualify as such at the time of application. For 2004/05, these are the applications that were received by the ministry prior to November 1, 2004 and had not been addressed by March 31, 2005.

Average processing time for issuing permits, compared to Alberta

The data required to report on this measure are not yet available.

Turnaround time for pesticide certification

The data for this measure are based on changes to the time required to complete the examination component of the pesticide certification process. In past years, the ministry required candidates to send payment to ministry regional offices by mail, then an exam was sent to a Government Agents office in the town where it was to be written. Once completed, the exam was sent back to the ministry regional office for manual marking and the results were issued to the candidate by mail.

The new streamlined process allows a candidate to arrange an exam and pay by credit card in one toll-free phone call. The appropriate exam is sent to the specified Government Agents office for the candidate to write the exam. It is then mailed back to the Nelson office, where an optical scanner marks the exam and the results are issued. Streamlining how the various steps in the process are done has reduced the turnaround time by several weeks.

Percentage of monitored communities achieving the Canada-wide standard (CWS) quality objective of amount of fine particulates in the air under 2.5 microns per cubic metre (PM_{2.5})

This performance measure identifies the percentage of monitored communities achieving the Canada-wide standard (CWS) for PM_{2.5} of 30 µg/m³ (24-hour average).⁵

⁵ Achievement is based on the annual 98th percentile value, averaged over three consecutive years.

The ministry collects PM_{2.5} data from approximately 60 air quality monitoring sites from over 40 communities across the province. The monitors are placed in communities that are more densely populated or where air quality may be an issue. The monitors are audited twice a year by the ministry following U.S. Environmental Protection Agency protocols for auditing and record-keeping standards. Each community's data are analyzed using SAS statistical software, and the end result for each community is checked against air quality results reported by other agencies (e.g., Environment Canada).

Per capita greenhouse gas (GHG) emissions relative to other provinces

GHG emission data are collected by Environment Canada and per capita population statistics are derived from Statistics Canada. The ministry relies on the quality of these data sources and the methodologies used by ministry technical experts and contractors for the analysis of the data. For more information, see <http://wlapwww.gov.bc.ca/soerpt/index.html> *.

The trends in environmentally significant variables, such as metals and nutrients, that indicate the health of water for 30 water bodies monitored under the federal/provincial agreement

The water bodies selected for monitoring are identified in a three-year business plan agreed to by the ministry and Environment Canada. They are selected based on the following criteria:

- whether provincial coverage is ensured;
- whether local activities may have a negative effect on the water quality of a water body;
- whether a water body is used and for what purposes (e.g., by residents for drinking, irrigation, livestock watering, or recreational purposes; and by wildlife and aquatic life); and
- whether water bodies are monitored by other entities.

Data are collected bi-weekly, or in some cases monthly, from each water body by trained samplers using established protocols. Once the samples have been collected, they are sent for analysis to laboratories that have been accredited by the Canadian Association of Environmental Laboratories (CAEL).

There are a wide variety of chemical, physical and biological indicators of water quality that are measured, including: major ions, dissolved solids, conductivity, trace elements, algae, zooplankton, nutrients, nitrate, pH levels, acidity, alkalinity, non-filterable residue and turbidity, colour, fecal coliforms, cyanide, adsorbable organic halides (AOX), temperature, total dissolved gases, dissolved oxygen, and flow. The trends in the above-monitored indicators are based on data collected regularly and consistently over periods of five to ten years or more. Data are reviewed annually for each of the 30 water bodies to assess whether there has been a significant variance from the trend. Each water body is subjected to a detailed statistical analysis approximately every five years (i.e., statistical analysis is conducted for five or six water bodies per year) as this is the timeframe in which it is expected that a change in the trend would become noticeable.

Number of product categories that pose a high risk to the environment with industry-led product stewardship

This measure identifies the number of product categories covered by the Recycling Regulation under the *Environmental Management Act*. For more information please refer to <http://wlapwww.gov.bc.ca/epd/epdpa/ips/index.html> *.

* Refer to note on page 3.

Percentage of high-risk environmental emergencies responded to effectively

The Environmental Management Branch of the Environmental Protection Division oversees environmental emergency management by the ministry. Environmental Emergency Response Officers use a Risk-Based Spill Assessment Model to determine which spills are "high risk," and which the ministry is therefore responsible for attending. (The ministry responds to spills for which the overall risk rating is "high.") The model uses a formula to determine an overall risk rating, which is based on an assessment of the public threat, environmental sensitivity, incident status, response time by other parties and response capability of other parties.

Measuring response "effectiveness" involves consideration of several issues, such as identifying the spills that require attendance by ministry staff, providing timely response, addressing the technical issues at the site, effecting proper response by parties responsible for the spill or by others when there is no responsible party, and ensuring appropriate clean-up. It can be challenging to measure effectiveness regarding these criteria individually or collectively. Currently, the measure involves an after-the-fact assessment of whether or not each spill was responded to effectively, and response effectiveness is reported based primarily on observation. The ministry is working on putting formal data collection methods in place.

Ministry progress in establishing designations and objectives for fisheries, wildlife and water quality using statutory authorities under the *Forest and Range Practices Act* (FRPA)

This is a new measure identified in the 2004/05 - 2006/07 Service Plan. Initially, the ministry will assess its progress by monitoring designations of wildlife habitat areas and ungulate winter ranges. As there is no direct relationship between the number of designations and the area covered by the designations, both measures are being reported as they are both important for demonstrating progress. Data are collected and maintained by program staff.

The percentage of known native species that are threatened or endangered in the province

The data and the criteria underlying general status assessments for this measure are presented in the federal government's report *Wild Species 2000: The General Status of Species in Canada*.⁶ This report was published for the first time using 2000 data. The next report is to be published in 2006 using 2005 data.

There are several data reliability issues related to this measure. To be accurate, the measure requires that we know of all existing native species in British Columbia and all species that are threatened or endangered. There are currently significant data gaps in both these areas, which is a challenge that is experienced in most jurisdictions that collect species information. Cooperation between both the provincial and federal governments should lead to progress in obtaining better data over time.

Number of collaborative management plans with First Nations

This is a measure of the number of collaborative management plans with First Nations. These plans are identified and counted.

⁶ Canadian Endangered Species Conservation Council (CESCC). 2001. *Wild Species 2000: The General Status of Species in Canada*. Ottawa: Minister of Public Works and Government Services Canada. <http://www.wildspecies.ca/wildspecies2000> *.

* Refer to note on page 3.

Visitor satisfaction with park and campground facilities and services

Approximately 5,000 campground park visitors are surveyed each year, usually between May 15 and just after the Labour Day long weekend in the first week of September. The survey is sent to each park for distribution by park operators with provisions made for random sampling of subjects. A Visitor Satisfaction Index is derived from the survey responses. This is an overall rating, averaged for the province, that campers and park visitors provide for five categories: cleanliness of restrooms, cleanliness of grounds, condition of facilities, sense of security, and control of noise. Responses of "excellent" and "above average" are considered to indicate satisfaction.

The survey data are entered into a statistical database program, which is used to perform all statistical calculations (the software product used is designed to help manage complex surveys). There may be subsequent follow-up sampling to confirm that the surveys were completed by legitimate park visitors.

Client satisfaction with fish and wildlife opportunities

A paper-based survey related to questions of client satisfaction was mailed to hunters and anglers in January 2005. A random sample of hunters was chosen from those who had purchased a resident basic hunting licence in 2004/05. The results that are reported on are the percentage of hunters and anglers that find their experiences to be very satisfying or somewhat satisfying.

Number of basic hunting and angling licences sold

The number of basic licences sold reflects the number of people participating in hunting and angling activities because a basic licence must be purchased before a person can hunt or fish or purchase a supplementary species licence. Data for this measure are obtained from the Government Agents Branch of the Ministry of Management Services and the ministry. The Government Agents Branch is responsible for the management of Angling and Hunting Licence Vendor Operations and the sale of all basic and supplementary licences throughout the province. The ministry also sells a small number of licences. Data are collected monthly and are reported by residency category and type of licence. Data are auditable as the number of licences sold must reconcile with revenues collected for sale of the licences.

Number of recorded visits to B.C. parks

There are three components to visitation data: camper-nights, day-use visits (which accounts for almost 90% of all visits) and visits to marine parks. Traffic counters, infra-red counters and visual counts are used throughout the province to collect data regarding the number of parties visiting parks. The number of parties recorded for each visitation component is then multiplied by a factor that estimates the average number of people per party to give the total number of recorded visits. The factors are 3.2 for camping parties and boating parties and 3.5 for day-use parties.

This is a measure of total recorded visits, not total visits, as there are parks where visitation data are not collected. Total recorded visits are not a good indicator of trends in overall visitation from year to year because they are affected by when and where data are collected, which has not been consistent over time. To address this, the ministry is developing a new methodology for deriving trend data from a subset of core parks within the protected area system. Data will be collected consistently each year from this subset of parks in order to identify changes in park attendance trends overall. Additionally, the ministry has initiated a review of the existing park attendance system with the goal of having a new attendance system in place by 2006.

Progress toward delivery of a three-year deregulation plan (measured as percentage reduction in ministry's regulatory count)

Regulations are counted according to the Regulatory Reform Policy (see <http://www.deregulation.gov.bc.ca/regreformpolicy.htm> *) of the Regulatory Reform Office at the Ministry of Small Business and Economic Development.

Progress in implementing risk management processes throughout the ministry

The ministry is piloting an organizational risk maturity matrix that is based on approaches used by the Risk Management Branch of the Ministry of Finance and the Office of the Auditor General of British Columbia. The matrix is modeled on the assessment matrix used by the Office of the Auditor General of British Columbia in assessing the degree to which annual service plan reports have incorporated the B.C. Reporting Principles.⁷

The intent is for this measure to reflect the "average" level of maturity in the ministry regarding degree of implementation of risk management practices and to monitor the level of maturity from year to year. The average level of maturity is determined by assessing progress in implementing risk management practices for a few key categories (leadership; culture and training; integration with planning, budgets, and business processes; monitoring and reporting) in the ministry's various program areas and identifying the overall situation.

Percentage of staff with an Employee Performance and Development Plan

This measure identifies the percentage of ministry employees with an Employee Performance and Development Plan (EPDP). The information is reported by the Strategic Human Resources Branch.

Survey of ministry employees to measure workplace wellness

The staff survey conducted in 2003/04 was also used widely in the public and private sectors. The survey was based on a 2001 National Work, Family and Lifestyle survey, conducted by Dr. Linda Duxbury of Carlton University and Dr. Chris Higgins of the University of Western Ontario, who had also surveyed 31,700 working Canadians at 100 major organizations, employing 500 or more people. The anonymous survey was open to staff from June 18 to August 18, 2003 and received a 70% response rate. The 35 questions and 160 items were responded to by 840 ministry employees. The survey is considered accurate within 1.5 percentage points, 19 out of 20 times.

Other Information

Annual Data

Where possible, the data in this document are reported on a fiscal year basis (April 1 - March 31). In some cases, calendar-year data are used, as indicated.

Financial Resources

For consistency purposes, the numbers (unaudited) reflected in the Resource Summary by Core Business Area are based on information included in the B.C. Public Accounts 2004 - 2005.

⁷ See the assessment matrix in *Building Better Reports: Our Review of the 2002/03 Annual Service Plan Reports of Government* at <http://bcauditor.com/AuditorGeneral.htm> *.

* Refer to note on page 3.

Appendix F: Ministry Office Locations

Vancouver Island

- Victoria
- Nanaimo
- Goldstream Park
- Parksville
- Black Creek
- Ucluelet
- Duncan
- Powell River
- Port Alberni
- Campbell River
- Port Hardy

Lower Mainland

- Surrey
- Chilliwack
- Brackendale
- Cultus Lake
- North Vancouver (includes Maple Ridge and Powell River)

Thompson, Okanagan

- Kamloops
- Clearwater
- Penticton/Summerland
- Grand Forks
- Vernon
- Merritt
- Princeton/Manning Park
- Lillooet
- Kelowna/Oliver

Kootenay

- Nelson
- Cranbrook
- Fernie
- Castlegar
- Revelstoke
- Golden
- Invermere
- Creston/West Creston

Cariboo

- Williams Lake
- Quesnel
- 100 Mile House
- Bella Coola

Skeena

- Smithers
- Terrace/Lakelse Lake
- Burns Lake
- Queen Charlotte City
- Dease Lake

Omineca, Peace

- Fort St. John
- Fort Nelson/Liard Hotsprings
- Dawson Creek
- Prince George
- Vanderhoof
- Valemount
- Fort St. James
- Mackenzie
- Chetwynd/Moberly Lake Park